

# AIRFIX

magazine

November 1975  
FOR PLASTIC MODELLERS  
monthly 25p



## in this issue

Modelling the Priest, Deacon and Bishop  
Early Warning Skyraider conversion  
Renaissance period wargames figures





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# AIRFIX magazine

November 1975  
Volume 17 Number 3

## FOR PLASTIC MODELLERS

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Editorial Director **Darryl Reach**  
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### Cover Picture

Reader Michael Young sent us this interesting shot of the preserved Junkers Ju 88G night fighter which is part of the historic aircraft collection at RAF St Athan. Note 'Englandblitz' badge as featured in Bryan Philpott's Ju 88 conversion article in our May 1974 issue (and his new book, *Airfix Magazine Guide 10: Luftwaffe Camouflage of World War 2*).

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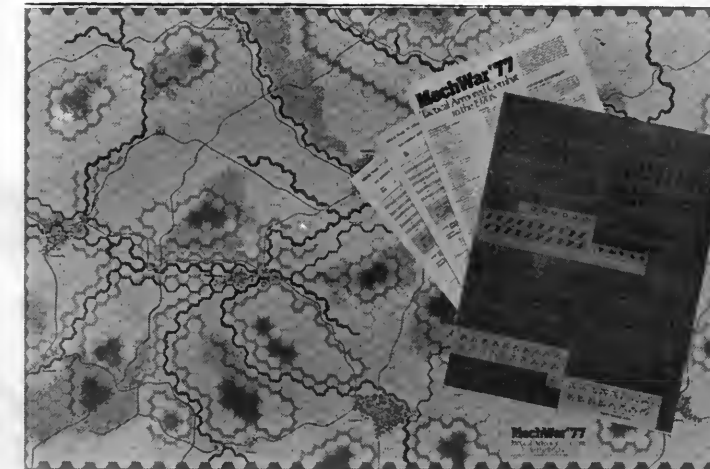
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AIRFIX magazine



Peter F. Guiver

## in the air



### St Mawgan open day

THE ANNUAL International Air Day that is mounted by this large Cornish airfield is unusual in that it is staged on a Wednesday in order to capture the holiday-maker, and indeed a vast crowd gathered on August 6. This event has replaced the memorable displays held at Chivenor a few years ago, and there was much of interest to be seen, despite rather dull, damp weather (the rest of the country was having a heatwave!).

The flying display comprised most of the usual items that appear at British military air shows, and some of these occurred in a short morning display. The main afternoon programme opened with a Buccaneer from No 237 OCU followed by an agile performance by a Nimrod from St Mawgan-based 42 Squadron. Aerobatic teams were present in force, but the low cloud somewhat ham-

pered the Patrouille de France, the Poachers and the Red Arrows, and completely thwarted the Falcons free-fall parachute display team.

A succession of noisy displays was given by a Lightning of 5 Squadron, a Jaguar from Lossiemouth, a Harrier of 233 OCU, an Etendard from the French Navy and a Phantom of 43 Squadron. Target-towing and ground-attack were demonstrated by three Canberras from 7 Squadron, a USAF F-111E of the 20th TFW swung its wings, and a bygone age was recalled by a Lancaster, Spitfire, Hurricane, Meteor and Vampire.

However, the main source of interest lay in the static aircraft park, with 23 machines from four air forces and four Naval Air Arms. A unique feature was the 'meet' of maritime patrol aircraft, and gathered around a Nim-

Above The 'Blue Herons' taxi in after their show at Yeovilton (see next page). Dark sea grey upper surfaces with white undersides. Foot of page Fiat G-91T from Waffenschule 50 in dark grey and earth camouflage, light grey undersides, orange dayglo nose, wing-tips, rudder and centre of underwing fuel tanks, green fin tip and black area around cockpit.

rod was a P-3C Orion from VP-47 Squadron, US Navy based at Moffet Field, near San Francisco, California; a Canadair Argus of No 405 Squadron, Canadian Armed Forces, from Greenwood, Nova Scotia; whilst the Royal Netherlands Navy sent an SP-2H Neptune of 320 Squadron, and an SP-13A Atlantic of 321 Squadron, both based at Valkenburg.

The French Navy supplied a Paris and an Etendard for the static park and the Luftwaffe provided two RF-4E Phantoms from Akg 51, an F-4F from JG 71, a JBG 34 Starfighter and a Fiat G-91T-3 based at Furstenfeldbruck with Waffenschule 50.

Noteworthy RAF aircraft on show included an immaculate Hastings T 5 from Scampton, a No 8 Squadron Shackleton AEW 2, and a Canberra TT 18 of No 7 Squadron, amongst several others, and in



November 1975



addition many of the flying display aircraft were parked nicely by the barrier prior to the show.

From the colour schemes point of view, however, the most interesting machine on view was an F-4D Phantom, serial 65-689, coded 'LN' from the 48th Tactical Fighter Wing at Lakenheath, on which the usual tan areas of the camouflage had been repainted in a rather sickly pea-green colour. Whether this heralds a change in USAF tactical camouflage must remain to be seen.

#### Yeovilton

SEPTEMBER 6 saw HMS *Heron* open its gates to the public for the annual Naval Air Day, and this year's show was again a spectacular event as far as the flying display was concerned. Sadly, the static park was somewhat sparse compared with previous

years, comprising nine machines, the most notable being a Canberra TT 18 from FRADU/Airwork, an 809 Squadron Buccaneer S2, a West German Do 28 and a French Paris.

However, what the static park may have lacked was more than compensated for by the action-packed flying display, which lasted for 4½ hours and consisting of some 30 items. The show opened with Lynx XZ166, and helicopters were to be much in evidence, with all current RN types on show. A new formation helicopter team, 'The Sharks', consisting of six Gazelles from No 705 Squadron, Culdrose, performed a pleasant display trailing coloured smoke.

Another new team was the 'Blue Herons', being four Hunter GA IIs flown by pilots from the Airwork operated Fleet Requirements and Air Direction Unit, and billed as the only civilian jet aerobatic team in the

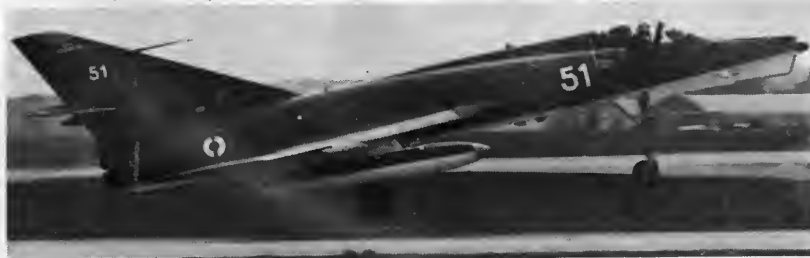
world (any other offers?). Also there were the Poachers, the Rothmans Pitts and the Red Arrows.

Overseas participation included solo aerobatics from an Etendard of 11 Flotille based at Landivisiau, a Draken two-seater from the Danish Air Force, and the usual hair-raising antics by a Mirage 5BA of the Belgian Air Force with some very low turns and a fish-tailing, see-sawing pass across the airfield.

Space precludes a complete listing of all the items but of note were displays by an 892 Squadron Phantom, an 809 Squadron Buccaneer, a Gannet AEW 3 from Lossiemouth, solo aerobatics by a Hunter T 8 of FRADU, and a sparkling display by the FAA Historic Flight Sea Fury. From the RAF came a 35 Squadron Vulcan B2 which

Continued on page 138

Top of page 48th TFW Phantom 65-689/LN at St Mawgan in the new pea green/dark green/olive camouflage (see also Letters page). Fin tip flash is blue (top), yellow and red. Left Etendard No 51 gets airborne at Yeovilton. Dark sea grey with off-white undersides. Nose of fuel tanks orange day-glo. Below Royal Danish AF Draken 35XT two-seater taxiing in after its display at Yeovilton. Patchy drab green overall. Note low-slung fuel tanks, twin wheel tail bumper and formation stripes on fin.



## AIRFIX NEW MODELS FILE

## NEW SERIES 1/32 SCALE TANKS

Undoubtedly one of the more easily recognised tanks of the Second World War, the Crusader III appeared in the summer of 1942. It was regarded as a respected opponent by the German tank crews and enjoyed considerable success in the skirmishing and hit and run roles.

Design of the 'heavy cruiser' Crusader series was started in 1938 by the War Office's Mechanisation Board in conjunction with Nuffield Mechanisation and Aero Limited.

Crusaders provided the hard-pressed Eighth army with a tank capable of matching the Africa Korps' Panzer III's and early MKIV's in firepower, if not in armour protection, during the crucial battle of El Alamein in October 1942.

Meanwhile, at the other end of North Africa, the 6th Armoured Division, equipped with Crusader III's, landed in Tunisia as part of the Allied First Army in Operation Torch.

In tank versus tank battles the hull-down position was much favoured and often easy to use due to the Crusader's low profile in the undulating terrain

common to many areas of North Africa.

A wide choice of markings is provided with this new Airfix Crusader III including Regimental insignia and tank squadron transfers for the North African Campaigns.

For up to date news and details of Airfix models, get the Airfix magazine price 25p.

Also available are a set of detailed Airfix books. These give background information to such models as the HMS Victory, Cutty Sark, Mayflower, Spitfire, Messerschmitt Bf109, P-51 Mustang and Hawker Hurricane.



**Crusader III Tank**  
**1/32 Scale. Series 8.**  
**New to the world's biggest range**  
**of construction kits.**

### Technical Details

Date of origin: 1942

Engine: 340 h.p. Nuffield Liberty engine

Top Speed: 27 m.p.h.

Range: 100 miles

Weight: 19.75 tons

Height: 7ft. 4ins.

Overall length (including fuel tank): 20ft. 8ins.

Basic Hull Width: 8ft. 8ins.

Armaments 6 pdr gun  
Besa machine gun.

## THE GUIDING LIGHT OF OPERATION TORCH.







#### Continued from page 136

deployed its huge brake parachute on landing, and Harrier GR 1 XW922 coded 49 from 233 OCU, Wittering, on which the camouflage was extended to cover the complete under surfaces.

The finale was the usual but spectacular assault on a 'rocket site' with Wessex helicopters from 707, 771 and 846 Squadrons, Sea Kings, Gazelles and a Sioux, whilst FRADU Hunters provided top cover and support. □

**Top of page** Gazelle XW890 '53' of the 'Sharks' team from 705 Squadron at Yeovilton. Light grey and orange dayglo with black shark emblem on fin. Note code 53 on nose in orange dayglo split by central panel. **Above right** Lockheed P-3C Orion from VP-47, USN. Light grey with white upper fuselage. Propeller tips red and white. **Right** Royal Netherlands Navy SP-2H Neptune 211 of 320 Squadron in very dark grey with white upper surfaces and markings. **Below** In the Yeovilton static park was this highly polished MS Paris from the French Navy.



## AIRFIX NEW MODELS FILE

## ROMMEL'S HALF-TRACK

In the Western Desert battles of 1941-43 the Germans came near to victory due to the tactical skill of their commander, Field Marshal Erwin Rommel. Rommel frequently directed operations from just behind the front line, his armoured radio command car becoming a familiar sight to the German troops.

'Greif' (Strike), as he named the vehicle, was a standard SdKfz. 250/3 semi-tracked reconnaissance car.

The SdKfz.250 series of armoured vehicles was designed and built by the firm of Demag. The 250's carried a crew of six and a main armament of two heavy machine guns. With the 250/3 version, accommodation was reduced to four to make room for the radio equipment.

No less than 14 different models of the basic 250 were produced including supply and cable laying vehicles, anti-tank and self-propelled guns and observation cars. The engine had seven forward and three reverse gears giving it a respectable

cross-country speed of 37 mph.

The Airfix 'Greif' reproduces a multitude of accessories and fine detail flexible tracks.

For up-to-date news and details of Airfix models get the Airfix magazine, price 25p.

Also available are a set of detailed Airfix Books. These give all the background information to such models as the HMS Victory, Cutty Sark, Mayflower, Spitfire, Messerschmitt Bf109, P-51 Mustang and Hawker Hurricane.



**Rommel's Half-Track  
32nd Scale Series 6.**

**New to the world's biggest range  
of construction kits.**

#### Technical Details

Date of origin: 1939

Make/Model: Demag SdKfz 250/3

Engine: 6 cylinder  
4.17 lit.  
Maybach.

Top Speed: 37 mph  
(cross-country)

Fuel capacity: 31 gallons.

Range: 186 miles.

Armament: Two heavy machine guns.

## OUR HALF-TRACK IS ROMMEL'S GREIF.



# US infantry figure conversion 1813-14

Another 54 mm model using Airfix parts from  
Martin Windrow and Gerry Embleton

THE WAR OF 1812 is one of those campaigns which is less well known than it should be in this country, partly because it was contemporaneous with the climax of the Napoleonic Wars, and partly because we prefer to forget about it. In most minds the only incident associated with this war is the tragic blunder of Pakenham at New Orleans, which caused such an unnecessarily high 'butcher's bill' among Peninsula veteran infantry which we could ill spare in 1815 in Belgium. The pernicious propaganda spread some years ago by one L. Donegan Esq., to the effect that the 'British ran like rabbits', left one with a vague discomfort about the whole incident! In fact, history presents a more inspiring picture: that of Major Wilkinson of the 21st, hit 12 times,

reaching the American parapet quite alone and dying in the arms of his admiring enemies, who exhorted him to hang on, because he was too brave to die...

The war was ultimately indecisive, although it was obvious that the time was past when a British army could survive indefinitely on American soil. Both sides won some notable victories, and both made some notable mistakes; and for modellers the campaign provides an interesting opportunity to make dioramas with British Napoleonic period troops and an unfamiliar enemy. Since the cut of the uniforms of the American infantry was very similar to British patterns, the conversions are relatively easy. We have chosen one of the simplest, and in describing it will digress from time to



Left The noted American uniform historian Philip R. N. Katcher in a previous incarnation, posing in Old Philadelphia in the red-faced blue uniform of an American infantry private of 1812-14. The old pattern coat was certainly worn by some troops after the appearance of the plainer all-blue type. The same structural conversion as described in this article can be painted up in the earlier and more colourful style. Corporals wore one white fringed epaulette on the right shoulder; sergeants two epaulettes, a crimson sash tied on the right hip, and a straight sword frogged to the bayonet belt, with a single-knuckle-bow steel hilt. Right Rear view of US infantryman in alternative cowhide pack and full marching equipment.

time to mention one or two general hints which may be of use to the less experienced modeller.

The US infantry started the war in coatees of virtually identical cut to British redcoats, but in dark blue with red facings at cuff and collar. The cuff bore four silver buttons and four white loops; the collar, completely outlined in white, had two horizontal loops on each side with buttons at their rear end. The breast was decorated with eight plain white loops equally spaced. The tails had double turnbacks — that is, the outside turnbacks used on British coatees met at the apex of the triangle, an inner pair of similar size and shape folding outward from the back central vent. The lining was white, showing only

\*See also *Military Dress of North America 1665-1970* (Ian Allan Ltd) Ch 3 and Plates 7 and 8, and *The American War 1812-14* by P. R. N. Katcher, Osprey Men-at-Arms Series.



at these turnbacks. A surviving officer's coatee has two silver rear hip buttons, two horizontal, straight-flapped pockets with four buttons, and two buttons, one above the other, on each tail in vertical line with the hip buttons and about halfway down the depth of the turnback, just outside the edge of the inner pair of turnbacks. Officers wore no loops on cuff or breast, and silver dollar decoration in place of white.

In 1813 an economy version appeared, of similar shape but without red facings. Of plain dark blue except for the white turnbacks, it was faced on the collar only. At the same time a 'foot or shako' of semi-British appearance replaced the slightly bell-topped cylindrical felt model of earlier years. Cloth shortages resulted in many American units fighting in white or grey fatigues; plain single-breasted round-bottomed jackets with standing collars, quite undecorated. The troops of Brigadier

AIRFIX magazine



Completed model of US infantryman of 1813-14, taking a breather from the congenial task of reducing a fellow-citizen's garden fence to firewood. The fence is from wooden spills, the log chopping block from a dead heather root with suitable chopping marks added with a modelling knife, and the grass from railway layout grass mat. The base is from the Scots Grey kit. This uniform is crisp and pleasing but a bit monotonous in colour, so we enlivened the white trousers with a patch in blue and white 'window-pane' pattern, perhaps from the soldier's second-best shirt. The face is painted with Campaign Colours, which allow a degree of blending between shadow and highlight impossible with water colours and essential for really realistic faces in these small scales. The axe blade is dull silver, 'sharpened' at the edge with a streak of bright silver.

General Winfield Scott, on the Niagara front, received coats of regulation cut but of plain grey cloth. Our model shows a private of one of Scott's regiments, the 22nd Infantry, which distinguished itself at Lundy's Lane in July 1814, the hardest-fought battle of the war. (Modellers tempted to consider combat dioramas might care to note that British units which fought at Lundy's Lane included the 1st, 8th, and 84th Foot. These would have worn the 'stovepipe' shako, and regulation uniforms as described in our *Peninsular War conversions series*, *Airfix Magazine*, July 1975. The facings and lace of the three regiments were respectively blue, square-ended pairs, yellow metal; blue, square-ended singly spaced, white metal; and yellow, square-ended pairs, white metal.)

The basis of the model was the Airfix 95th Rifleman, with odd bits from the American Infantryman 1775, the Scots Grey, and His-

tores spares. The figure is of crisp and clean appearance and is easy to make.

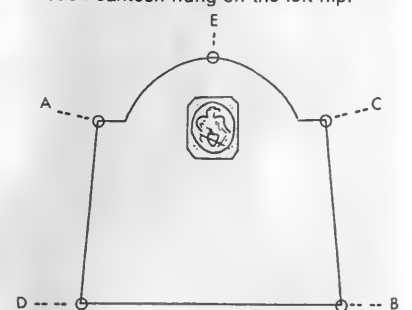
**Shako** Take the Rifleman's shako body and file and carve away the cords and tuft and the rear section of headband. From thin plastic card make a front section according to the pattern illustrated herewith, and cement in place. The line A-C should match the top line of the shako body, the line D-B the bottom of the shako. The measurements are D-B, 9 mm; vertical distance from D-B to A-C, 6 mm; and vertical distance from E to A-C, 2 mm. A silver plate, rectangular with the corners cut off obliquely, is made from plastic card and cemented as indicated. When the new front is in place, add the Rifleman's cockade at C on the left side, just below the top, with a tuft rising above it — we used a Historex tuft. A line of plaited cord — again, Historex — runs from B up to A, with two hanging tassels below A. The Rifleman's shako peak should be used, and a silver button painted at D, at B, and in the centre of the cockade at C. The cord, tassels and tuft are white, the rest of the shako entirely semi-gloss black to represent leather.

**Coatee** Stick the halves of the Rifleman's torso together, then cut away outer rows of buttons. In the centre row, starting from the bottom, cut away the second, the fourth, then every button from the sixth onwards, leaving only the very top one intact. This is because the area will be covered by cross belts, which will lie more naturally without the rather prominent buttons under them. File the heavy turnback detail right down to a more natural level; add inner turnbacks from plastic card, after cutting away the vertical lines of piping down from the hip buttons. When you have selected arms to match your chosen animation, carve away cuff detail to allow painting of plain straight cuffs with four silver buttons around the top of the outside and front surface. The coatee

is now complete; do not use the Rifleman's shoulder-straps. When painting stage is reached paint the whole coatee (including turnbacks) mid-grey, the neck-stock black, and the buttons silver.

**Trousers** These can be either exactly as in the Rifleman, or Coldstream, kit; or overalls made from the Imperial Guard Grenadier or French Line Infantryman 1815 kits. In the former case — we used the standing Rifleman's legs — they should be white with dark grey gaiters and black shoes. In the latter case, carve away all gaiter detail to produce tight-fitting trousers with built-in spats at the foot and no outside closure or buttons at all. These overalls can be white, blue, brown or grey. Remember that the groin joint between pairs of legs should be well filled with cement or putty; trousers of this period had no flies, but a square 'fall' in the middle of the stomach, buttoned at the top corners — though the buttons are seldom visible below the coat.

**Equipment** This was conventional for the period: a pair of white crossbelts supported a big plain black leather cartridge box behind the right hip and a socket bayonet in a black, steel-furnished scabbard behind the left hip. A painted cloth haversack and a wooden canteen hung on the left hip.



Cap pattern, as described in text.

We used the bayonet and canteen from the American 1775 soldier kit, as being the best-moulded in the spares box. The cartridge box was a Historex spare. The bayonet belt goes over the cartridge box belt, and bears a plain silver oval plate, which we shaved from the end of a piece of sprue filed to size and shape.

The haversack of the Scots Grey is about the best in the range for size and shape, and as our pose makes it very visible we used this, with the usual plastic card sling and a buckle made from the Scots Grey kit. As the bag is hanging by the sling, we made its shape more natural by filing a dip in the top surface and rounding and shortening the bottom corners — in this position the side pieces would be pulled up and the middle section would sink in comparison.

The haversack and the canteen should be painted sky blue — we used the smashing Light Blue from the Rose watercolour range, which is almost worthy of a Maxfield Parish sky, but shades no doubt varied widely. Remember to line in and highlight the various parts of the canteen with darker and lighter shades of the same blue. The canteen should have either the regimental number, or the US cypher, in bright red on





the front face.

If you want to show a soldier of this period kitted up for the march, use the American 1775 soldier's pack on a conventional H-harness, as in the Rifleman kit instructions. The pack is sky or dark blue with a big red 'US' in the centre of the rear face, the harness black leather, and the folded blanket visible in the sides of the pack, grey.

The musket is very similar to French models; we used the one from the American 1775 soldier kit, but one from the Guard Grenadier or French Line kits would be equally suitable. All furniture is steel, and the sling white. (We tend to carry on something alarming about painting muskets, we know; but it is one of those details which can destroy the scale illusion of an otherwise perfect model. We have found — we repeat — that a most attractive finish can be achieved in the following way. Paint the wood parts matt dark brown. When dry, paint the metal parts with silver or dull silver (one part silver to three parts gloss or semi-gloss black). When dry, go in again with the brown to clean up the joints between the two colours. Then very carefully line the joints with matt black, applied slowly with a fine brush; the details of

muzzle band, lockplate, cock and frizzen can be outlined as well, to bring them out from their background. When dry, paint over the wood parts with Burnt Sienna drawing ink.)

A word about painting, with cringing apologies to experienced modellers who are probably far better at it than we are. Every modeller has his own method and preferred materials. Ours are Rose watercolours for clothing, Campaign oils for faces. The totally matt Rose finish strikes us as preferable to the very slightly semi-gloss of Campaign Colours for cloth textures. By varying the shades you can still highlight and shadow effectively. One way is to lay on your basic colour thinly; add dark dramatic shadows; paint over when dry with a thin wash of basic shade; and then highlight with another thin wash. This softens the divisions between shades quite nicely. We tend to start off by undercoating the finished model all over with a thin matt Humbrol of some lightish shade. This provides a good surface for the watercolours, and has another advantage as well, especially with conversions. However carefully you file, sand and finish, a model made from parts of different kits and scraps of plastic card of different colours has different textures and types of surface. This makes it hard to see whether you have done a perfect job of fairing one surface into another, smoothing patches of filler, and so forth. Coat the whole deal with a single matt shade, and oversights become immediately visible, in time to correct them before the final paint job.

The selection of animations is one of the greatest challenges and greatest joys of figure modelling, and cannot be overestimated. The inspiration for this model came from noticing (a) that we had a spare hatchet in the box, from the American 1775 kit; (b) that the right arm of the Rifleman kit, if the hand was turned inwards towards the face, would support a bottle or canteen nicely; and (c) that the 'scenic bits box' contained a number of wooden spills which we had been sure would come in handy but which had not yet been tried out. The true diorama fanatic can always be distinguished at a range of 100 yards by the fact that he walks everywhere with downcast eyes, as if looking for a dropped wallet. In fact he is looking at every piece of wood, pebble, foliage, and assorted urban garbage through 54 mm eyes, on the look-out for things which can be used in his hobby. This habit can lead to collisions with trees, lamp-posts, passing trucks and police officers, and should be kept within bounds; to be seen by one's prospective father-in-law apparently picking fag-ends out of the gutter, say, can be awkward. Nevertheless, it can bring dividends. The pride of place in our scenic bits box is a marvellous piece of dried-out dead weed stem which is the exact size, shape and finish of a dead and hollow tree trunk, with bark peeled off and surface weathered to that marvellous shiny silver-grey of really old wood. One day it will raise a mediocre model to a new level of appeal. Now if we can just work out how to make a 54 mm scale racoon . . .

# Wargaming Operation Sealion

In this instalment, Terry Wise examines the aerial and naval problems of

OPERATION SEALION never took place but over the years many authors have been tempted to speculate about what might have happened had the operation been launched, and as recently as May 1974 the *Daily Telegraph Magazine* published the results of a wargame based on Sealion, held by the Department of War Studies at the Royal Military Academy, Sandhurst, in which many senior British and German officers took part. Futura Publications have recently published a book by Richard Cox (*Sealion*) in which this wargame and its findings have been expanded into a full length fictitious account of the invasion of Britain, using all known factors, while back in 1971 Pan Books published a book of short stories by C. S. Forester (*Gold from Crete*) which included a 60 page story on what might have happened if Sealion had taken place. These writings are guaranteed to inspire World War 2 wargamers (and others!) to start producing U-tanks in order to fight Sealion as a wargame.

The potential of Sealion as a wargame is really enormous: in addition to conventional infantry-tank-artillery warfare, there are paratroop drops to the rear of defence lines or to seize bridges etc; amphibious warfare — including those U-tanks; commando raids on key positions, including the use of Brandenburgers; large and small feints to other areas; and full scale naval and air battles to be fought. Single games could be played, but Sealion is most tempting to the wargamer as a large campaign, particularly since accurate and detailed maps are so readily available from Ordnance Survey. (By September 1938 the Nazis had compiled detailed maps of Britain showing airfields, dockyards, military defences and depots, rail, road and canal networks, oil depots, power stations and telephone and telegraph centres, so both sides could use O/S maps.)

The outcome of both Forester's and Cox's accounts of Sealion is defeat for the Nazis, and this was the decision reached by the umpires of the wargame at Sandhurst. If you plan to fight Sealion as a wargame it is worth studying the reasons for this 'built-in' defeat. The main problems causing defeat were: (1) shipping the invasion forces and supplies across the Channel while the RN was on the loose; (2) obtaining air superiority. Let us look at the Luftwaffe's position first.

During the preliminary attacks on Channel shipping the German bombers proved to be extremely vulnerable, especially the Stuka, and had to be escorted by more and more fighters, which reduced the scale of operations. Another disadvantage was that the fighters would not be able to concentrate over England, for fighter cover would

be needed over the beaches all day long and there must therefore be a constant stream of aircraft coming and going. The tactical endurance of the Me109, for example, was about 80 minutes, allowing only 20 minutes over England — less when supporting the western end of the invasion. On the other hand the RAF would be able to strike en masse as one wave of Luftwaffe fighters withdrew, another was over the beaches, and a third on its way across the Channel.

Although the German pilots were better trained, most having fought in Poland and France, and the Messerschmitts were faster than the Hurricanes and Spits, the British fighters had greater manoeuvrability and, because of their ability to concentrate against inferior numbers, could expect to down twice as many aircraft with a total loss of pilots, whereas many of their own pilots would be reclaimed. This proved to be the case during the preliminary air battle: between July 10 and August 10 the Luftwaffe lost 217 aircraft to the RAF's 96. The trend continued during the main air battle, launched on August 12, when the Luftwaffe attacked radar stations and fighter fields and lost 31 to the RAF's 22. The fighter stations were all back in action within 24 hours and only one radar station (on the Isle of Wight) was knocked out. It was replaced by August 23.

This first phase of the main air assault was designed to bring Fighter Command to battle and destroy it, but the RAF refused to be drawn and the radar and section station control systems kept the rate of attrition in favour of the RAF. On the 13th the Luftwaffe flew 1,485 sorties and by the end of the 14th believed it had destroyed more than 300 fighters. In fact the figure was less than 100. On the 15th there were 520 bomber and 1,270 fighter sorties: the Luftwaffe lost 75 aircraft, the RAF 34 fighters. In the next major clash, 16th-18th, the Luftwaffe lost 236 to the RAF's 96, Luftflotte V losing a sixth of its aircraft and thereafter playing only a minor rôle. The Luftwaffe had now lost 363 aircraft since the 12th; the RAF 181 fighters in the air and 30 on the ground, but of 154 pilots lost only 63 had been replaced and aircraft production was 40 short of the losses.

However, these losses were proportions changed between August 10 and September 6. During this period there were 33 major raids, two thirds of these against the section stations and airfields, and the RAF began to come apart at the seams. (Biggin Hill, for example, was reduced to one third efficiency in this vital stage of the battle.) The Luftwaffe lost 380 aircraft; Fighter Command 286, with some 170 seriously damaged. Worse, output of new aircraft was



Above The steel walls of England which barred Hitler's way in 1940. Ramillies is in the foreground with Revenge, Nelson, Rodney and Barham behind. Below A wargames attack on a vital port in the south-east corner of England. Armour and artillery advance in the wake of the assault troops, who have temporarily cleared the harbour area (construction of this harbour complex is described in Airfix Magazine Annual 5, on sale now). Bottom Royal Artillery coastal battery in 1940: over-exposed and short on ammunition.



November 1975

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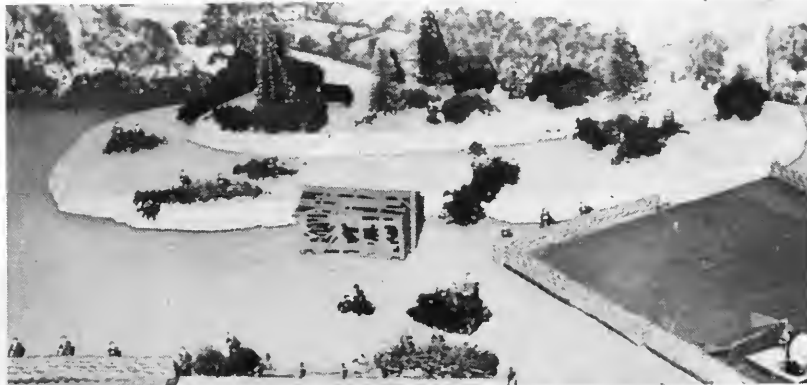
only 296. 103 pilots were killed and 128 wounded out of a total of not much more than 1,000. Fighter Command was now in serious trouble, its efficiency impaired by the damage to or destruction of airfields and section stations, and the exhaustion of its pilots — a large number of whom were now virtually inexperienced. Then on September 6 German radio broadcast 'London is about to be destroyed. If you want to save yourselves leave now!' Goering had switched targets at Hitler's orders, in revenge for a bombing raid on Berlin — which in its turn had been ordered by Churchill in retaliation for an attack by 12 German bombers which lost their way and unloaded their bombs on central London!

At 1740 on the 6th nearly 1,000 German aircraft began bombing London. Fresh waves arrived at 2000, pouring their loads into the great sea of red flame that was the docks and East End. On the verge of victory the Luftwaffe had abandoned its destructive and successful assault on the RAF's airfields and operations centres and by doing so lost all hope of ever achieving air superiority.

It is interesting to note that in the Sandhurst wargame this 'political' decision to switch the main assault to London was reversed, and the Luftwaffe was allowed to continue hammering the airfields. In my opinion this was a logical decision and I find it hard to believe that, given this reversal of Hitler's order, the Luftwaffe could fail to achieve air superiority. Potential campaigners are advised to consider the rates of attrition stated above, the drastic effect the Luftwaffe's assaults were having on Fighter Command; the aircraft and pilots available to both sides (see earlier articles); and to bear in mind that, once the paratroops and assault troops arrived, several of the RAF's fighter fields near the coast (notably Lympne and Hawkinge) may have been used by the Luftwaffe.

The problems of the Navy may have been eased by the Luftwaffe achieving air superiority but it remains doubtful whether the Navy had sufficient transports to bring over supplies and reinforcements quickly enough, or sufficient warships to keep the crossing lanes open in the face of the overwhelming numbers of the RN. The mine barriers would have caused some delay but are unlikely to have been really effective: the RN had already mastered the magnetic mine by this time and the acoustic mine, which came into service in August, was not yet available in sufficient numbers. The coastal artillery had no radar and could not operate at night, and being of very large calibre had a slow rate of fire and short barrel life. It did not prove very successful against convoys in the Channel and is unlikely to have been much more than a nuisance to deployed fighting ships.

However, the English Channel was no place to fight a major sea battle; both sides would have been hampered by mines and shallow waters, making the larger ships sitting targets for fast destroyers on torpedo runs. This would have cancelled to some extent the RN superiority, but the German submarines would also have been affected



**Top** A wargames Home Guard unit to the rear of the harbour mans its positions as a regular officer brings news of the landings. Modelling details for the various concealed strongpoints will be given in a later article. **Above** a German feint lower down the coast runs into strong opposition from the local Home Guard, using dummy buildings to conceal strongpoints, and backed by regular artillery. **Right** Converted trawlers operating as minesweepers in 1940.



by the shallows and minefields and become much more vulnerable to attack by destroyers. With its superior numbers in destroyers and small vessels the RN was almost certain to disrupt the lines of communication, even if only at night when the Luftwaffe was powerless to intervene.

Liners could have been used to ship large numbers of troops from Rotterdam, but losses would have been heavy if these ships had been caught. Nevertheless, Hitler had in the past shown he was willing to accept heavy losses to achieve his ends, and the

possibility should be considered. On the other hand the inexperience of the barge crews, and the unwieldiness of their craft, may well have led to the loss of many barges at night through bad weather or had seamanship and they would have beached in the wrong place, creating more confusion ashore. All those factors need to be borne in mind when planning a wargames campaign.

Next month we will discuss the Wehrmacht and how to achieve a more balanced game, with the Nazi general having a decent chance of success.

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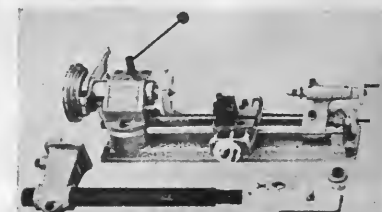
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November 1975

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Michael J. F. Bowyer

## army-air colours 1937-45

### Part 2 — No 22 Group goes to war

IN SEPTEMBER 1939, No 22 Group which administered the Royal Air Force's army co-operation squadrons had an operational strength of nine squadrons. Six of these flew Lysanders, one was equipped with Hectors and two had long-nosed Blenheim Mk IVs. Nos 2, 4, 13 and 26 Squadrons using Lysanders and Nos 53 and 59 Squadrons with Blenheims formed the Air Component along with Hurricane squadrons. This was an air element known as the Field Force whose purpose was to give direct support to the British Expeditionary Force. It must not be confused with the Advanced Air Striking Force which had an offensive bombing role. The Main Party of the Field Force set out for France on September 18 1939 and the four Lysander squadrons followed early in October.

Early production Blenheims were of the short-nosed variety, and to improve the machine for reconnaissance purposes the long-nosed Mk IV variant had been developed. First deliveries of this type commenced in January 1939 beginning with

L4835 which joined 53 Squadron on January 19 1939. By March the Squadron had received L4836, '37, '38, '39, '40, '41, '42, '43, '44, '45, '47, '48, '49, '50, '51, '52, '54, and '64. No 59 Squadron was also equipped soon after receiving L4859-L4863. The role of the squadrons was night reconnaissance.

Although under the control of HQ Air Component, the Hurricane squadrons of the Field Force retained their interceptor fighter capability being responsible for fighter defence of the British Expeditionary Force and can barely be considered as army co-operation aircraft. When they crossed to France the Lysanders retained their pre-war camouflage of Dark Green and Dark Earth with black and white under surfaces. The latter soon changed to silver. In many cases the undersides of the fuselage remained camouflaged as was the case before the war. The Blenheims retained their black under surfaces. Roundels in all cases were Type B which appeared on the fuselage sides and above the wings. Although the Air



Above A Lysander of 13 Squadron prepares to take off from a snow-clad airfield in France during the winter of 1939-40. Its fuselage roundel is Type A, a change which took place about December 1940 on all aircraft in the Air Component. Below Two Blenheim IVs photographed before entry into RAF service. N6161 was used by 114 Squadron and lost in France. N6167 joined 59 Squadron on May 25 1939 and was destroyed in a crash on June 12 1939.



Component Hurricanes bore rudder striping this was not applied to the Lysanders and Blenheims. Medium grey code letters were carried by all of the aircraft, changed when full mobilisation came about at the outbreak of war.

In France the Lysander squadrons settled at highly improvised airfields. Tented accommodation was supplemented by the use of civilian billets for the personnel and some farm buildings were also put to good use. Simulation of such a scene suggests itself for diorama purposes. After arranging themselves, the squadrons undertook training in tactical reconnaissance, each unit being assigned to an army unit in the British sector of France. Squadrons practised close liaison with the army and provided photographs for training purposes.

Not until May 1940 did the Lysander squadrons come into contact with the foe. Instead, they faced firstly a winter of mud and then heavy snow falls, both of which restricted flying. The Blenheim squadrons encountered similar problems, but managed some night reconnaissance operations before the German attack in May 1940. In the case of No 59 Squadron night sorties began in April 1940 with a reconnaissance to the Cologne area.

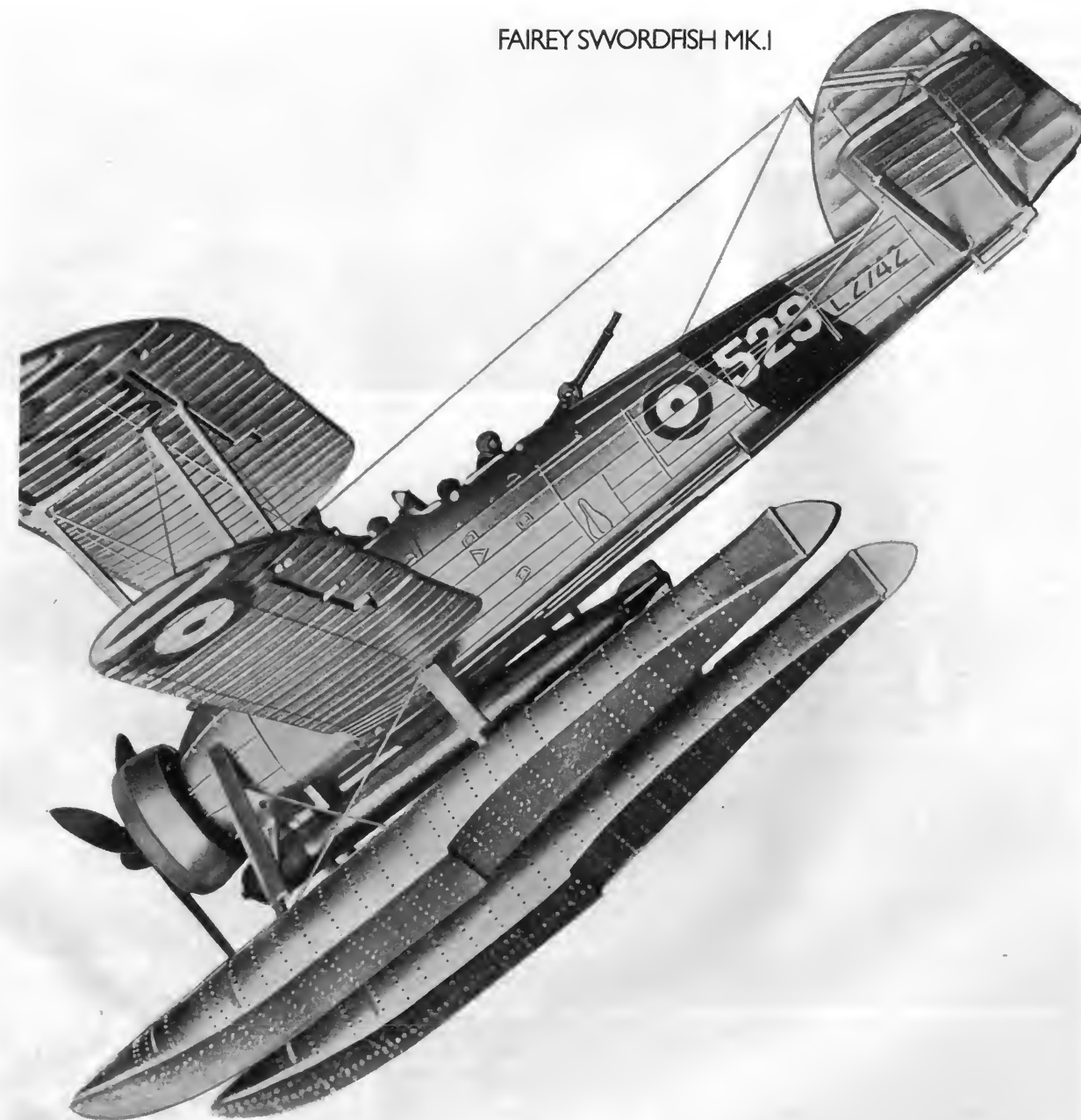
As soon as the Lysander Squadrons left Odiham for France their places were taken by Hectors of Nos 613 and 614 Squadrons taking up war stations. Like the pre-war Lysanders, some of these Hectors still had black and white under surfaces. A new Lysander squadron, No 225, was formed at Odiham on October 3 1939. No 614 Squadron meanwhile converted to Lysanders, but it was some weeks before either squadron was recognisable as an operational formation.

At Old Sarum the School of Army Co-operation was busy working up crews for all squadrons. It was looked upon as the Group Pool, the name given in 1939 to operational training units yet to form as such. A second School of Army Co-operation began forming at Andover in November, Blenheims for its equipment being transferred from Old Sarum. Ultimately it became No 2 School of Army Co-operation, providing for the Blenheim squadrons.

During November the new residents at Odiham found themselves co-operating with Territorial Army Units at Aldershot and in Southern Command. Additionally No 16

Continued on page 148

FAIREY SWORDFISH MK.I



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Squadron was presently placed at the disposal of Eastern, Northern and Scottish Commands.

A shortage of Lysanders was only too apparent by October 1939 and 22 Group looked for a possible new type of aircraft. Air Ministry suggested the Fairey Battle, and at the end of October 1939 one was used for five days of trials. This was too short a period of time, and in any case the machine was not fitted out for the specialised army co-operation role. No 22 Group requested further trials which were undertaken over three days by No 16 Squadron. The Battle had little to commend it and was turned down.

From an equipment point of view the most interesting idea of the period concerned trials with television cameras in a reconnaissance role. A Lysander flew over Salisbury Plain carrying a camera transmitting pictures to the receiver in the army headquarters concerned. There were promising results for what was obviously an idea far ahead of its time and one which posed many problems, not least of them its susceptibility to jamming.

One of the most portentous developments during the period prior to the fall of France was work done in connection with 'Forward Observation Posts', later known as Air Observation Posts. There was a need for aircraft to spot for artillery and to locate counter batteries. The Lysander was too heavy for the task, for which a light, manoeuvrable aeroplane offering a good view for the pilot or observer was required. Considerable opposition to the idea existed in the Air Ministry, which persisted well into 1941 mainly because of the belief that losses would be high due to the vulnerability of such aeroplanes. Nevertheless, Air Ministry agreed in December 1938 that 22 Group and the School of Artillery should explore the idea.

Initially the idea was that a gunner should act as pilot, knowing as he would the needs of artillery, but all types of aircraft available needed fully trained pilots. Various types of light aircraft and Cierva C30 autogiros were considered in 1939. Then came a lucky break when Taylorcraft aeroplanes, an offshoot of an American company, proposed the use of their Model C Taylorcraft and were meanwhile working on their Model D and had, by October 1939, flown its prototype G-AFWN. This was inspected and 22 Group obtained permission to purchase an example. Some Model Ds were in store and one, G-AFZJ, was completed and painted in Dark Green/Dark Earth camouflage with silver under surfaces and black registration letters. It was loaned for trials at Old Sarum until the machine ordered could be completed.

Early trials against a Spitfire suggested that the Model D could, indeed, evade a fast fighter, but the Air Ministry remained unconvinced. With their faith lodged in the Lysander maybe the Ministry did not wish to be convinced and maybe there was an element of inter-service rivalry. Meanwhile other designs were considered, among



Above Hawker Hector wearing the colours in which such aircraft entered the war. PJ-B:K9690 of 59 Squadron shown here did not see war service, crashing on May 19 1939. Below Blenheim IV L4842 joined 53 Squadron on February 23 1939. After a period of use at Farnborough it rejoined the squadron and is believed to have been lost on operations on May 17 1940. Type A1 roundels were changed to Type B on entry into RAF service (Flight).



them the Arpin Monoplane and the GAL Cagnet, but favour still rested with the Taylorcraft. The 'brown/green/silver' prototype T9120 was delivered in December 1939 and in January 1940 three more were ordered.

December's trials at Larkhill revolved around a shoot controlled by an artillery officer. He was able to control the fire without difficulty for the first two shoots of up to 3,000 yards range, but for a 7,000 yard shoot he had to fly midway between the battery and the target, which would have subjected him to return fire. It was considered that the target should be located from behind friendly lines, also that only an aircraft specifically designed for the role would be suitable. A proposal followed for some Tiger Moths to be fitted with radio and sent to France for field trials. If the idea proved practical then there would be a great saving in expensive aircraft and crews. With the delivery of more Taylorcraft Ds the scheme to use Moths was dropped.

February 1 saw the formation of 'D' Flight to conduct further trials and try the Stinson 105 X1050. Some dissatisfaction surrounded the restricted view from the Model D, and delivery problems caused the Stinson to be turned down.

Field trials were now essential so the three Model Ds and X1050 moved to France in April. On May 9 the first operational sortie was flown over enemy lines, but next day the 'blitzkrieg' burst and trials ceased. On May 20 'D' Flight returned to Britain into temporary disbandment.

By December 1939 the conversion for Blenheim crews had meanwhile come under way at Andover. No 16 Squadron's strength had been raised to 18 Lysanders. The search for a Lysander replacement was still on, with interest now centred on the Defiant.

Bad weather in January and February reduced flying as in France. No 16 Squadron moved to Hawkinge then crossed to France in February 1940. A new Lysander squadron, No 110 Squadron, RCAF, arrived at Odiham where 12 Lysanders awaited them. The Pilotless Aircraft Section at Henlow was placed under 22 Group, and took its Queen Bees to Hawkinge in February to provide targets for anti-aircraft gunners. The main unit for this purpose was No 1 Anti-Aircraft Co-operation Unit, a large formation equipped mainly with Henleys which the army always felt should have been used as dive bombers but which were now operating as target towers. At the end of

February 1940 at the request of the War Office No 1 AACU sent a detachment to France to provide training for anti-aircraft gunners at practice camps of the BEF. At home 110 Squadron RCAF provided targets for the searchlight companies throughout the western half of the United Kingdom.

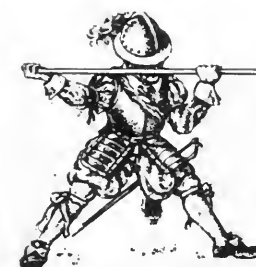
During March many fighter affiliation exercises were carried out by the home-based Lysander squadrons during which it was surprisingly found that the Lysander was not such an easy target for fighters as had been supposed.

A Rota Flight using Cierva C No 40s in the customary 'brown/green/silver' finish was formed to provide an internal communications system in France. No 110 Wing formed on March 9 at Ringway taking over searchlight and anti-aircraft co-operation work from civilian firms, as the result of which a wide assortment of civil aircraft were impressed for service, including Short Scions and de Havilland Dragonflies. Co-operation work began on March 27 with the Anti-aircraft School at Wolverhampton. Flying mainly by night the impressed machines had their under surfaces painted matt black.

Behind the scenes it was being appreciated that a German invasion of Britain could not be ruled out. Accordingly a special unit, No 416 Flight, formed at Hawkinge to provide aerial photographs of areas of Britain that might be invaded and had its 9 Lysanders available to give reconnaissance support to home forces.

By April 1940 No 613 Squadron was beginning to have its Hectors replaced by Lysanders and the strength of No 225 Squadron had risen to 18 aircraft. A reservoir of Hectors for the Practice Flying Unit at Meir was then built up. Two new flights were added to No 1 AACU which now embraced eight towing and five pilotless aircraft flights providing target facilities for nine anti-aircraft camps. No 110 Wing now embraced No 6 AACU at Ringway co-operating with searchlight units and having responsibility for the assortment of impressed machines where maintenance was concerned and also trained personnel to handle them. No 7 AACU also formed at Ringway soon moved to Castle Bromwich to co-operate with the searchlight school at Wolverhampton, and Nos 8 and 9 AACUs were in process of forming. Training for searchlight and anti-aircraft crews was taking on increasing importance and was to become a major task for the army co-operation organisation. As a future pointer equipment-wise nine Fairey Battles joined the AACUs in April 1940.

At the end of April 1940 five Lysander squadrons and two Blenheim squadrons supported by Hurricanes formed the strength of the Field Force in France and at home 22 Group's equipment was ever increasing in types and strength. Training in France had been getting steadily underway after the bad winter with squadrons rotating to practice camps in areas of clear weather. Squadron bases had changed to as better sites were found and units changed their army affiliations. All was ready for battle, but when it burst with fearsome intensity in May 1940 it rapidly engulfed the Field Force. □



## renaissance warfare

### Converting Airfix figures for Renaissance armies

THOUGH AIRFIX HAVE not yet produced any pike and musket sets in their 00 figure range, a little ingenuity will produce almost any soldier of history from their existing figures, and this is as true of the Renaissance period as of any other; the converter has to spend some extra time, faces special problems, such as paint flaking off flexible parts like swords, and must recognise that his figures have limited resale value whatever the loving care that goes into them, but I think he enjoys many advantages over the buyer of ready-made lead figures.

Not least of these, of course, is a huge saving in initial cost, but almost equally important is the opportunity to use craftsmanship and initiative; the conversions described here are not intended to be more than a sample of the possibilities, with examples of useful techniques — I am sure that most readers will soon think up better ideas of their own. I have leaned here

toward simplicity and speed, since I feel that mass use is the metier of the Airfix 20 mm figure; no-one who wanted single perfect specimens would be likely to start on this basis, but excellent wargames forces can be produced, provided the amount of work required is kept within strict limits.

As mentioned in my earlier series, my own original Renaissance force was an Airfix army, and I will start with a few conversions from this force — they were intended as an English 16th Century army, but, with the exception of the longbowman, most of the figures could serve in any Western European 16th Century army.

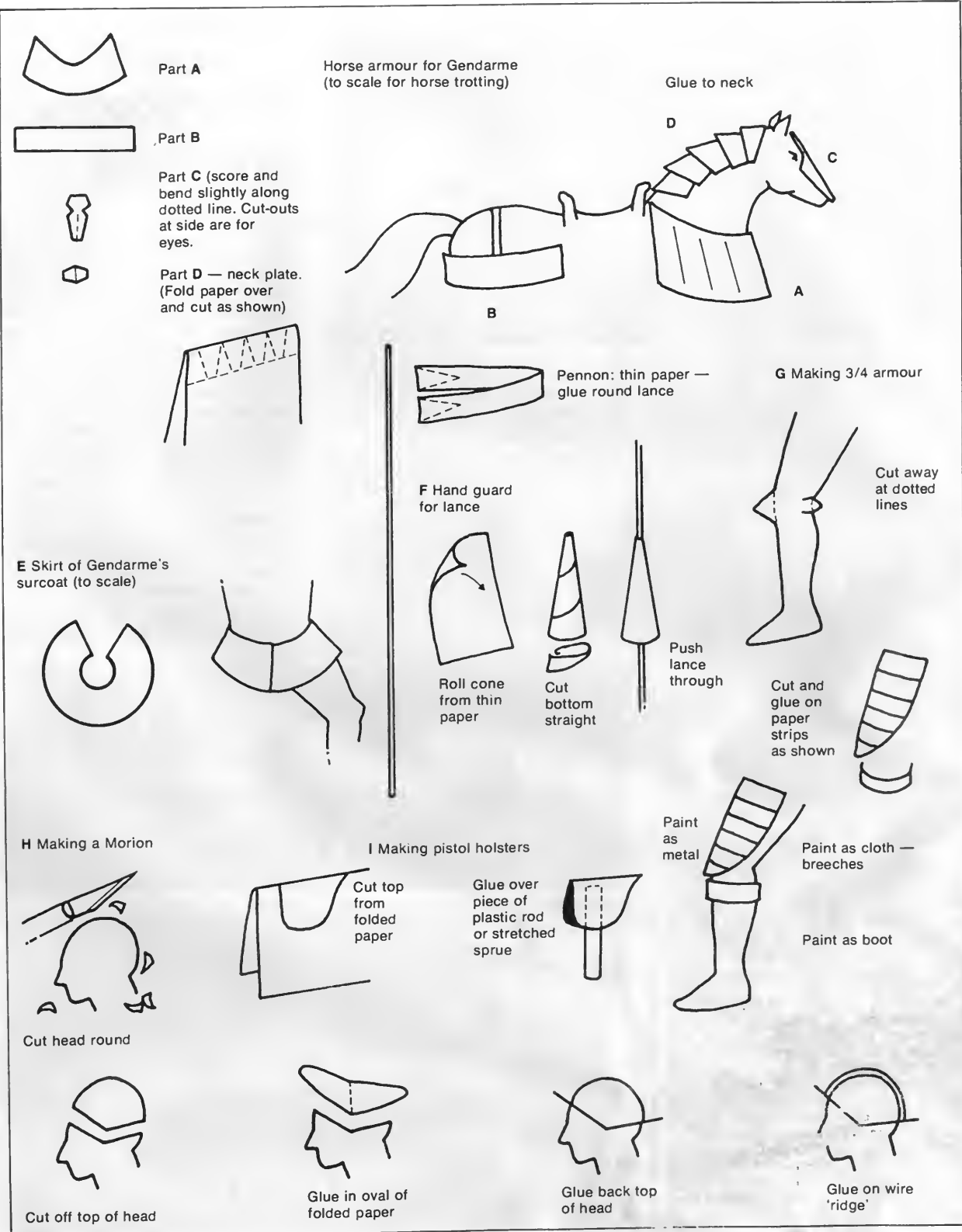
### Longbowman

Best figure for this is a firing longbowman from the Robin Hood set; the problem is not to make any major changes, but to 'update' his medieval appearance.

Top Lansknecht arquebusier, halberdier (note mail cape) and pikeman converted from Airfix 8th Army figures. Below English billmen, standard bearer and archer (the former from French World War 1 figures, the latter from the Robin Hood set).







Using a sharp modelling knife ('ware fingers!') remove his hood, and cut the bottom of his tunic to look like a pair of short baggy breeches. A 'Scots cap' was often worn by such archers, and this beret-type headgear is most easily produced by using a small ball of Plasticine squidged down on the head (wherever Plasticine is used in these conversions, it is attached to the figure with 'Uhu' glue and its surface hardened with a liberal application of clear dope — obtained from a model aircraft shop).

That's it — he is painted in one colour — say, white — for tunic and breeches; lower sleeves and hose in contrasting colours; red cross on chest and back and red slashes on breeches and upper sleeves. Scots cap red or blue. Very simple indeed, but very effective.

### Billman, arquebusier and standard bearer

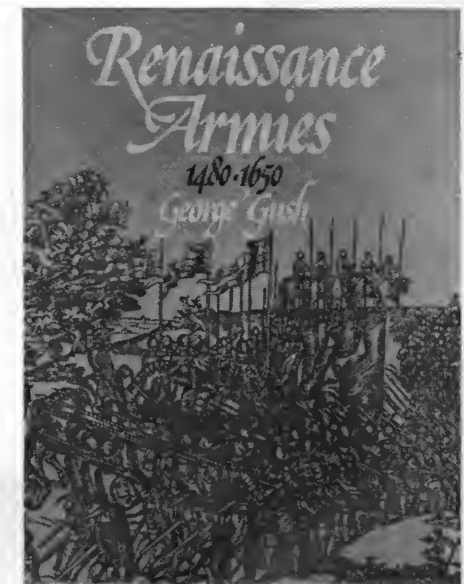
All produced from World War 1 French Infantry set, whose main advantages are, firstly, a helmet which can do duty as an infantry 'pot' of this period, and secondly, the skirts of the greatcoat, which can be cut to resemble baggy breeches, with the upper coat as a short jerkin. The puttees, too, can be painted as stockings (you could cut away the detail of the binding first, but this is not essential in such a small scale). The snag is the considerable amount of equipment on the figure, all of which — save perhaps a knapsack or pouch for the arquebusier — has to be cut away for these conversions.

Various charging and loading figures can become billmen; remove rifle, pierce hands with a standard pin held in a pair of pliers, and insert the bill shaft, preferably of thin piano wire (again obtainable from model shops catering for builders of model aircraft). The blade of the bill could be of paper or card, but the thinnest gauge of plastic card is most durable. In any case, it is attached to the shaft after the latter has been fitted to the figure, using quick-drying epoxy resin glue. The haft should run about 4 mm up one side of the blade, for a simple but firm joint — this again doesn't really show, after painting, in this scale. (I use a mix of gloss black and silver for most blades and helmets.) Halberds, and other pole weapons, can be made very easily in the same way.

My standard bearers are mostly made from the riflemen with arms away from their sides. The arms can be bent into a suitable position by bringing a small heat-source near the point to be bent, bending, and holding in place until cool. A match or candle is suitable, though until I stopped smoking I used to find a glowing cigarette-end ideal! Flag staff is same as shaft of bill, while I normally use paper for flags, though some prefer heavy metal foil from a toothpaste tube — more durable (though paper lasts well if painted and not touched too much) but heavy enough to make a plastic figure very unstable unless on a base.

Arquebusiers are figures in a similar position. As an arquebus was shorter and clumsier than a rifle, cut away the latter except

Continued on page 152



The growing bands of 'pike and shot' enthusiasts will welcome with open arms this new book on their period. Based on the author's series of popular articles in *Airfix Magazine*, but including several new sections and many more illustrations, it is a complete guide to the organisation, uniforms, tactics, weapons and flags of Renaissance armies from Charles the Bold to Cromwell. Ideal for modellers, wargamers and historians, it includes a wealth of detail on such famous troops as the German lansknights, Polish winged hussars and Turkish Janissaries, leaders like Gustavus Adolphus and Maurice of Nassau, and weapons from crossbow to cannon. All the major and most of the minor powers are covered, with over 500 illustrations.

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Right Irish Gallowglass (from the Sheriff of Nottingham set) and Kern (from the Robin Hood set). Left Close-up of Lansknecht pikeman converted from 8th Army figure.



quickly than aim at perfection and end up with no army to use!

The mail 'bishop's cape', covering the shoulders, favoured by the Lansknechts, can be made from a bit of a face-tissue and glued on with Uhu. This tissue, when painted with a black-silver mix, gives a textured appearance very like mail, and I have used it for this purpose in other conversions. When painting Lansknechts, of course, anything goes; mine mostly have tunic and breeches in quartered colours, with slashes on the upper sleeves and breeches, and lower sleeves and hose in contrasting colours, black hat with various plumes, and brown boots.

## Irish

Likely opponents for an English force, and easy to produce. Robin Hood set is the obvious source for the 'kern' forming the mass of an Irish army, practically no conversion being required — perhaps the hood should be removed, and most men should have a javelin, made from part of a small pin or 'lill' thrust through the hand. Tunic could be saffron (which was yellow) or unbleached linen or similar; tight hose probably in browns, greens or greys; figures with cloaks retain them, and these should be painted in tweedy colours with a parti-coloured fringe.

The other figure shown is a gallowglass mercenary, one of the Irish heavy infantry; the axeman from the Sheriff of Nottingham set is perfect for him, the only alterations being to cut away representation of plate armour at elbow and knee, and to glue on a

tissue 'skirt' below his tunic, representing the lower part of his mail; the axe is his standard weapon and the simple helmet is suitable if you paint the neck-guard as hair.

The mailed Irish cavalry would be more difficult, but I think the Sheriff set might provide the basis for these too.

## Cavalryman

This figure is based on a Waterloo French Cuirassier, a very good starting point for 16th and 17th Century cavalrymen, since his horse furniture, corselet, gauntlets and large boots are all suitable, and even his helmet could probably be cut into a sort of burgonet. This particular conversion, however, has a morion helmet, as worn by many horse and foot in the 16th and early 17th Centuries. It is made by cutting his pate to a curved shape, then slicing it off by two angled cuts, as shown. An oval card brim is then glued in, and the crown of the head, slightly shaved down to allow for the thickness of the brim, glued back above it; a piece of thin wire glued across the crown makes a crest ridge.

The lower part of the cuirassier's body is built up with Plasticine into the shape of padded breeches, and part of a pin is stuck into this to act as scabbard (Airfix for some unaccountable reason providing their Cuirassiers with swords, but no scabbards to keep them in!).

On the saddlebow are glued a pair of holstered pistols, very widely carried by horsemen of the 16th and 17th Centuries. These are made, as shown, from a small piece of paper folded over a bit of Slaters Plastic rod, and look quite effective when



Spanish-type cavalryman of the 16th Century, based on the Airfix Waterloo French cavalry.

place. This figure is a Herreruero or similar, with sword and pistols, but could equally well be one of the ubiquitous mounted arquebusiers of the period, in which case the pistols might be omitted, but he would require a belt over the left shoulder (a strip of paper or foil glued on) and an arquebus in his hand. The weapon could be cut from one of the many crawling infantry figures, and with care it and the hand can be welded together by a touch from a knife blade brought to near red heat over a gas ring or candle; a delicate job, but on the soft plastic which Airfix use for these figures, glue will be useless for a joint like this. The same technique is the only satisfactory way of attaching Airfix horses to their stands, but be prepared to spoil a few, learning!

Another alternative armament would be a piano-wire lance thrust through the outstretched hand (as usual, make the initial hole with a pin) to make him a typical Spanish lancer. Helmet and cuirass steel (black/silver mix, or Humbrol Railway steel) or gloss black, distinguishing them from matt-painted clothing, which on this particular figure is yellow with slashes in red.

## Gendarme

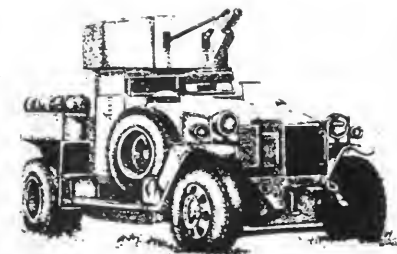
With his armour blackened, the fellow above makes a reasonable reiter. The remaining 'standard' horseman of the 16th Century, the fully-armoured man-at-arms, can also be produced from Airfix figures. You require a horse and rider from the Sheriff of Nottingham set — rider should be one without shield.

The horse armour (only needed for early 16th Century man-at-arms) is made from writing-paper, cut as shown; you can have scalloped lower edges and scored lines, if desired, to represent the ribbed German armour of the time. Part A is wrapped round the front of the horse and glued with Uhu, part B round the hindquarters; you could cover the upper hindquarters too, but in view of our aim — simplicity — I suggest glueing a narrow strip across just short of the tail, and otherwise depend on paint for this area. C is glued to the head, and the plates D stuck along the neck after the mane has been cut away (you will need four to six of these; attach the rearmost first — the rest overlap it!). A simpler alternative would be to cut away the mane and paint in the plates, outlining them in black.

The rider's earlier date is mainly given away by his short, tight surcoat, so the main modification here is a 'skirt' — part E — make by drawing round 1/2p — glued on; use thinner paper here, such as typewriting carbon copy paper, since it will have to be crumpled at the front to clear the saddlebow. The high back of the saddle should be cut away.

His sword can be replaced by a piano-wire lance thrust through the hand (if necessary, flatten the hand with pliers first). This would be of the shaped medieval type, and a hand-guard can be built up with paper rolled into a cone as shown in diagram F.

For a later 16th Century Gendarme, omit the horse-armour; the figure could have leg armour cut away and tassels and boot-tops of paper or foil added as shown in diagram G.



# 8th army in the desert

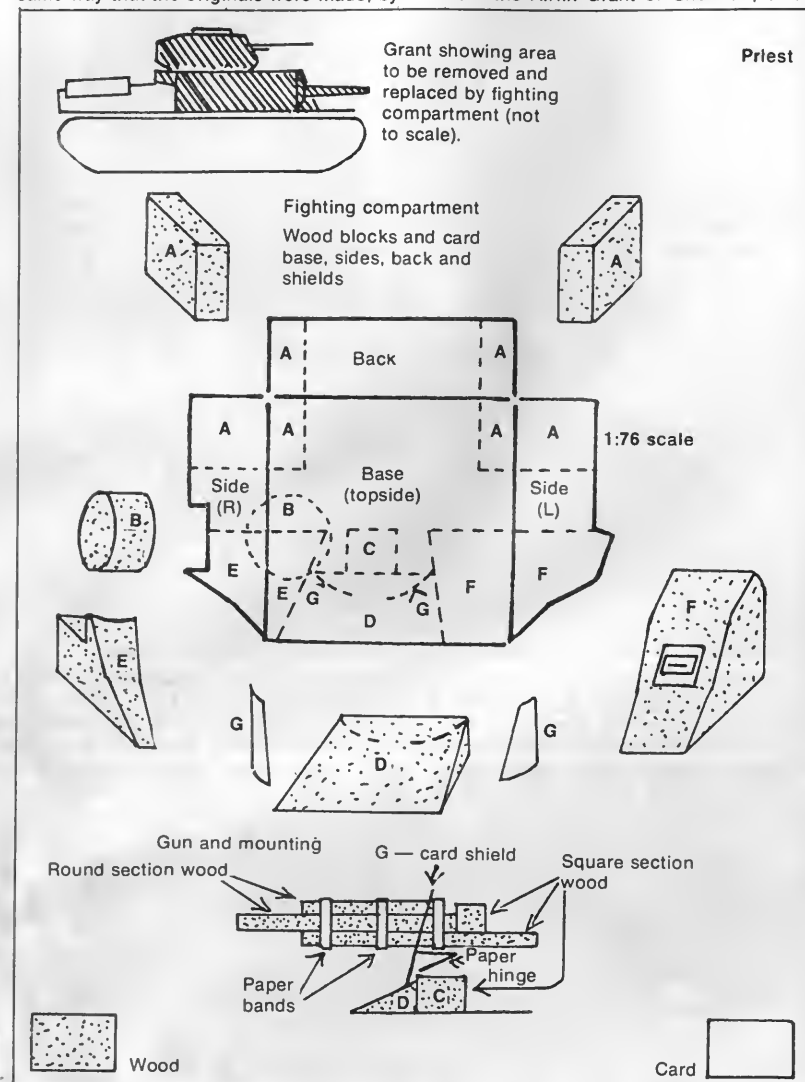
## Modelling self-propelled artillery by John Sandars

FROM LATE 1942 self-propelled artillery began to appear in the 8th Army, and during 1943 at the end of the desert campaign the 105 mm 'Priest', 25 pdr 'Bishop' and 6 pdr 'Deacon' were all in use. A/A artillery, however, remained towed, the SP Bofors gun not being introduced until after the fighting in the desert was over.

Modelling the SPs is best done in much the same way that the originals were made, by

combining existing gun and vehicle models, with any necessary additions of armour, etc.

The most successful SP was the 'Priest', which first saw major action with the artillery regiments of the armoured divisions at Alamein. It was made up from a Grant tank hull and an American 105 mm field gun. This can either be modelled from a Minitank Sherman and 105 mm gun, as in the photograph, or from the Airfix Grant or Sherman, or any



## Continued from page 151

for the butt, and replace with a short length of pin, which also has the advantage that it won't shed paint as the rifle inevitably does.

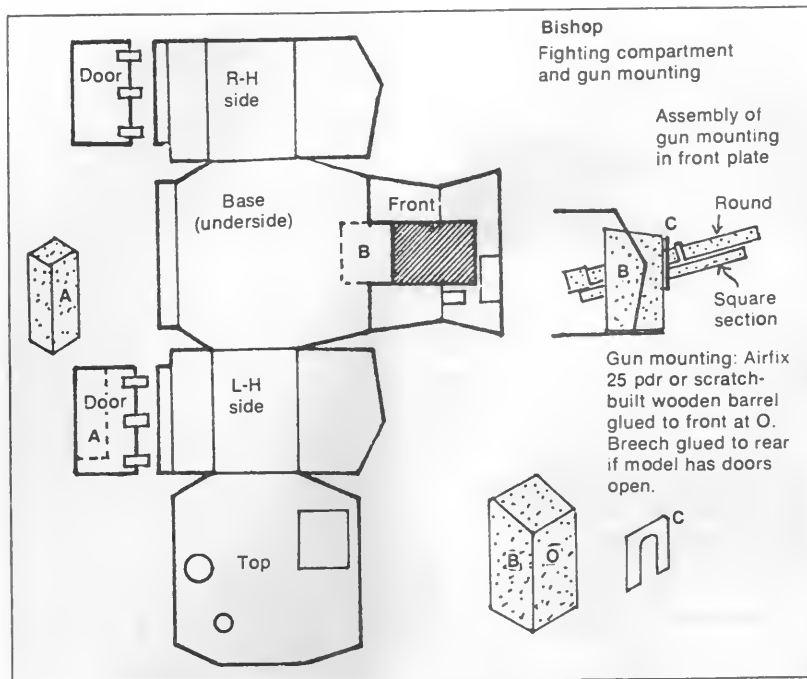
Figures of this general type could also serve as 16th Century halberdiers and pikemen; mine have bright coloured breeches with contrasting slashes, sleeves and hose in a second colour, and are painted with a short leather jerkin. This latter can have darker lines painted on to indicate the sewn-in metal plates of a 'jack', or rows of silver dots for the studs of a brigantine.

## Lansknechts

Like the above rather nondescript characters, Lansknechts are very useful since they can serve in any Western European 16th Century army. They are less easy to make, the best basis, oddly enough, being the Eighth Army set — these do not have too much equipment, though what there is must be cut away; their rolled-up shirtsleeve becomes a puffed and slashed upper sleeve, while the bare arm is painted as a tight lower sleeve; with very little smoothing-off the shorts serve as padded breeches, legs are painted as tight hose, and socks and shoes as boots. Cut a bit flatter and with a couple of Plasticine plumes added, the tin hat becomes a wide-brimmed hat of the kind often worn.

Quite a good representation of the short Lansknecht sword can be made by cutting the end from a pin and pushing it through the plastic on the figure's left hip (it should be at a near-horizontal angle). Top is painted steel or brass, for the hilt, lower part black for the scabbard — an 'S'-shaped guard, of fuse wire, could be added with epoxy, but better get your figures finished





others that are available.

The Minitank gun can still be used as it is a bit on the big side for its scale, or one can be

scratch-built as shown in the diagram.

Airfix commandos, in their stocking caps, make good gun detachment figures.



**Above** Priest 105 mm field guns made as described but with sandshields and kit added. This model is based on a Minitank vehicle and uses the same firm's 105 mm gun barrel. **Below** Deacon 6 pdr SP anti-tank guns with camouflage nets and kit added. Wheels and axles from Airfix Quads have been used.



**Above** Scratch-built Bishop using the Airfix 25 pdr gun barrel and limber. Camouflage is charcoal black on desert yellow. Figures are Airfix Commandos and gunners. **Below** Airfix figures converted as described. Gun position officer, survey party (with pin and plastic card theodolite), signaller and BSM.



The 'Bishop' was a Valentine tank with a British 25 pdr in an armoured box on top in place of the turret. For this the Airfix 25 pdr and the Fujimi Valentine are ideal.

The 'Deacon' was a rather rarer bird, and only one battery of them actually saw action. The Airfix 6 pdr is suitable for the gun if shortened a little, and you can convert a Matador from the Airfix 5.5 gun, or airfield kits, but this is a costly way of going about it as you will only be able to use the wheels and chassis. It is probably better to scratch-build the vehicle as shown.

The simple sketches for making up these three guns are only intended to show how the basic conversions can be made with wood and card. A lot of detail has been omitted and in some cases shapes have been slightly simplified. Even so the addition of figures, and general clobber, can make them look quite realistic for wargame purposes, as in the photographs.

Field and Medium Artillery was of little use without observation posts, signals equipment, and such specialised troops as surveyors. OPs tended to use vehicles generally similar to, but not necessarily identical to those of the troops that their guns were supporting. This was to prevent them from being singled out by the enemy.

The most common were probably the Stuart tank with armoured units and the 8 cwt truck with infantry ones. Universal carriers specially converted to OPs, and Indian-pattern carriers also seem to have been used.

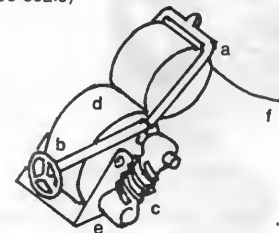
For a Stuart OP a Hasegawa 1:72 scale kit



Stuart 'Honey' tank as an OP. Note extra aerial mounted on left front, and cable reels on left front track guard and back of vehicle. Model scratch-built using Minitank track and suspension parts.

can be used, but this is a bit big when used with 1:76 scale figures and vehicles so you may prefer to scratch-build. In either case the only additions needed to the basic vehicles are some cable reels, which are easily made up from dowelling and card discs, and perhaps an extra wireless aerial. The top of an Airfix 8th Army infantryman (old set) with binoculars makes a good observer.

#### Mechanical cable layer (1:35 scale)



- a Minitank winch drum
- b Minitank steering wheel
- c Airfix Churchill suspension spring
- d 1/4" dowel drum
- e Card base
- f Cotton 'telephone line'

The 8 cwt truck can be made as described in the February 1975 edition of *Airfix Magazine*, and the carrier OP can be converted from the Airfix one in the 6 pdr gun kit. (You will have one left over if you are making a 'Deacon' with the gun.) All that is necessary is to blank the gun slit in the sponson with a bit of card, and add cable reels and a wireless aerial. It is not necessary to modify the engine cover as described in the February edition, but you can mount a Bren gun with an A/A mounting on it, as in the photograph, if you wish. An old type 8th Army set machine-gunner makes a good wireless operator in the right-hand side sponson, while an observer from the top half of the figure with binoculars and the lower half of the kneeling rifleman from the same set, can be put in the front one.

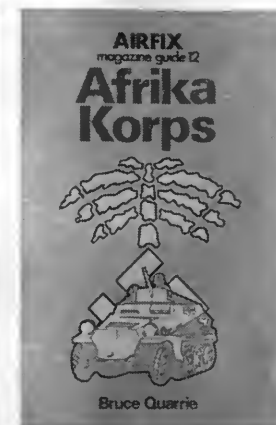
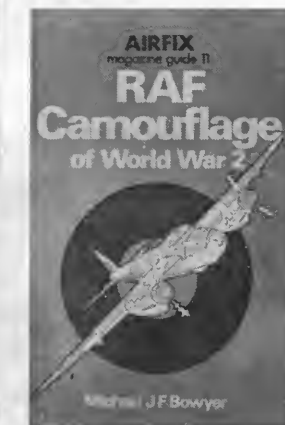
Continued on page 156

November 1975

## The latest Airfix Magazine Guides No 11 **RAF Camouflage** of World War 2

Michael J. F. Bowyer

Far more than a mere primer on the subject, this book breaks new ground by detailing precisely the colour schemes of UK-based fighter, bomber, reconnaissance, transport, army co-operation, trainer, target and target-towing aircraft, and even flying boats. Other chapters cover the Middle and Far East theatres and special markings. Well illustrated with photos, plus pages of camouflage scheme drawings based on wartime blueprints. **£1.20 net** (£1.40 by post).



## No 12 **Afrika Korps** Bruce Quarrie

The story of one of the few military formations to become a legend in its own lifetime. A guide to organisation, weapons, vehicles, uniforms and equipment, together with performance tables which will prove invaluable to wargamers. Gerald Scarborough helps with modelling some of the vehicles which are unlikely to appear in kit form, and Robert Gibson writes on modelling DAK figures using Airfix polythene soldiers. **£1.20 net** (£1.40 by post).

Both 64 pages, 8 1/2" x 5 1/2", fully illus with photos & drawings. November 6.

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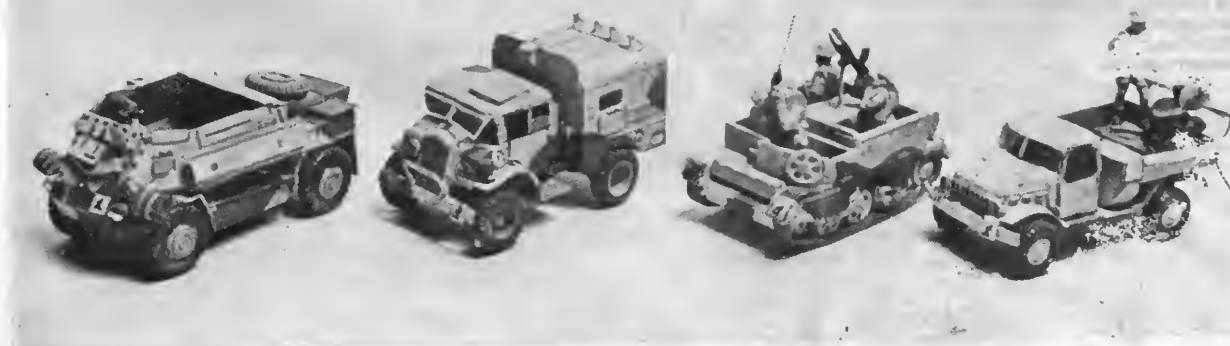
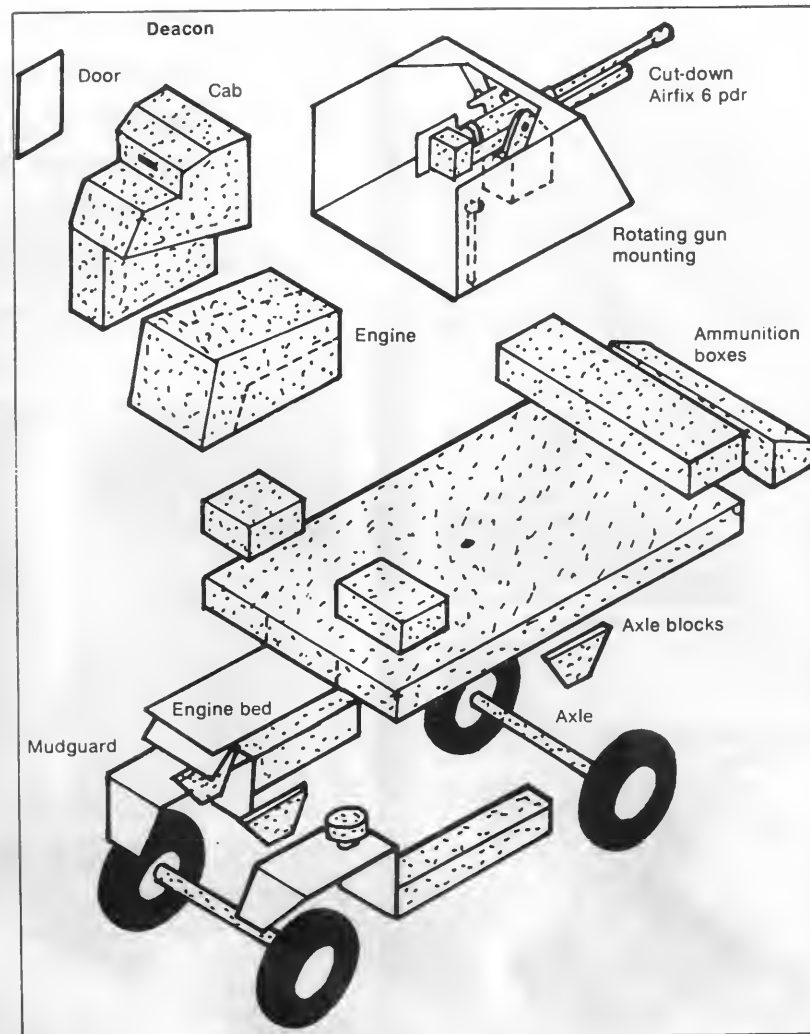
Continued from page 155

The other vehicles shown in the photograph are an 8 cwt telephone cable layer, a 15 cwt light wireless truck and an Indian pattern wheeled carrier. The trucks are again as described in the February article. The cable laying machine can be made from odds and ends, as shown in the drawing, and the figure guiding the cable from the Airfix mine detector figure. The wireless truck has the body from a Minitank communication truck (Z224) with added aerials. The Indian carrier is a rather more complicated vehicle which has to be completely scratch-built, and because of space the method cannot be included here, but if you wish to make one, the John Church plan No 112 is of this vehicle.

The survey party are made from a firing rifleman, and one with his rifle at the trail, both with weapons and packs cut away, while the telephonist is a machine-gun loading number with the ammunition belt removed and a fuse wire and bent pin telephone put in its place. The other two figures are both from artillery kits. One with a cocktail stick megaphone and helmet trimmed to a stocking cap makes a good gun position officer, while the other has a board made of card and a World War 1 head added to the original kneeling figure.

As already stated these instructions are for making up simple wargame type vehicles. If you wish to make more sophisticated models plans can be found as follows: 'Priest' Bellona Military vehicle prints; Series 3; 'Bishop' Bellona Military vehicle prints; Series 31; 'Deacon' MAFVA magazine Tankette Vol 3, No 5, and a photograph of the light wireless truck can be found on page 230 of *The Observer's fighting vehicle directory*; WWII by Bart Vanderveen.

The next article in this series will deal with armoured vehicles, but since many of the tanks used in the desert are now available in kit form, and general points concerning their modelling having already been dealt with in the November 1973 issue, it is intended to concentrate on other types of AFV.



Extra vehicles: Indian pattern wheeled carrier, light wireless truck, OP Universal Carrier, and telephone line laying truck.

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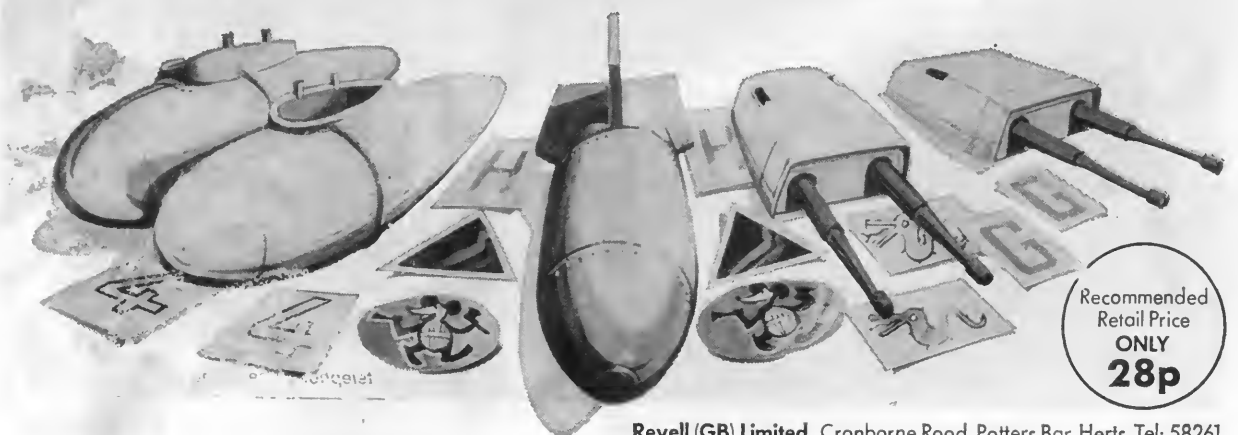
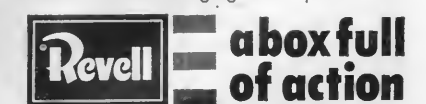
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# Early Warning Skyraider



Douglas AEW 1 Skyraider modelled from the Airfix kit in 1:72 scale by Bryan Philpott

THROUGHOUT AVIATION history there are many examples of apparently mundane aircraft performing tasks that were far beyond their original design spectrum and in so doing, not only stealing the limelight from later designs, but carving their own niche in aviation's hall of fame.

The inbuilt quality and performance of the Douglas Skyraider saw it rise from such humble beginnings to heights that were not even dreamed of by its designers.

Tracing its history back to 1944, the Skyraider can claim that its rise from comparative obscurity to a versatile 'Jack-of-all-trades' was due mainly to the Korean War. Few people at that time would have been bold enough to forecast that this large

single-engined aircraft would still play an important part in the skies over Vietnam nearly 20 years later.

The Skyraider evolved as a direct result of a decision to stop all future work on the Douglas BTD Destroyer in 1944. The Douglas design team, under the leadership of Ed Heinemann, took this setback in their stride and more-or-less overnight came up with proposals for an attack aircraft for the US Navy which was to result in Douglas receiving a contract for the first of 28 variants of the aircraft that was to become the Skyraider.

First flight of what was then called the Douglas BT2D-1 Dauntless II, took place on March 18 1945 and it was immediately apparent that the aircraft would be a winner. Two months later, on May 5, a contract for 548 machines was signed but with the ending of World War 2 this was reduced in two stages to 277. In February 1946 the appellation

Skyraider replaced Dauntless II, and in April when the Navy reviewed their designation system the BT2D-1 was changed to AD-1.

During the early stages of its career several shortcomings and weaknesses, due mainly to the original weight saving measures, manifested themselves, but each problem was tackled as it arose and solved before too drastic a redesign was necessary. Very early in its career the versatility of the Skyraider became obvious and several of the original pre-production batch of 25 were modified to perform a variety of tasks outside the original 'Attack' specification.

Between 1947 and 1950 Navy squadrons received and worked-up the aircraft with no more enthusiasm than they would have greeted any other new type; but in 1950 the Korean War erupted and early combat operations proved the capability of the Skyraider, with the result that its low production rate was soon stepped up.

The success of the aircraft in the close

Continued on page 160



## German Half-Track Vehicles of World War 2

Unarmoured support vehicles of the German Army 1933/45 John Milsom

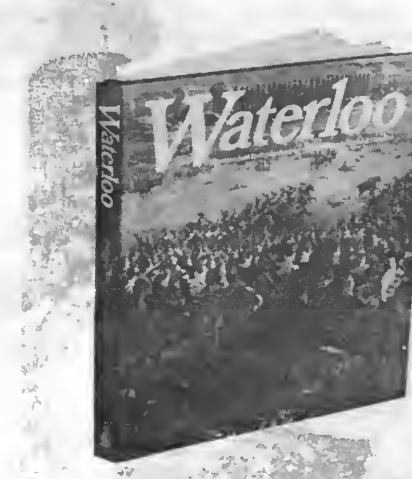


## WATERLOO

By Commandant Henry Lachouque — Introduction by David G. Chandler

Magnificently and lavishly illustrated in both colour and monochrome with text by one of the greatest of French Napoleonic historians, *Waterloo* is as thrilling and full of suspense as any epic adventure story. It is, nonetheless, an authoritative and detailed study in words and pictures of one of history's most famous battles.

*Waterloo* is a large format book 11¼ x 10¼ in. 108 pages. £6.95 (plus 50p p & p).



## NEW FROM ARMS & ARMOUR PRESS

### GERMAN HALF-TRACKED VEHICLES OF WORLD WAR 2

BY JOHN MILSOM

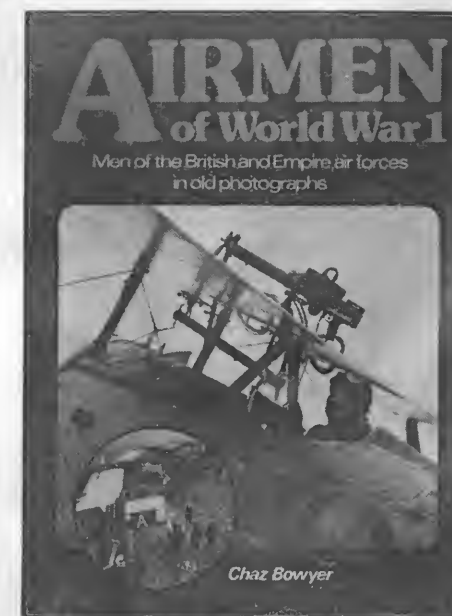
In the years prior to World War Two, half-tracked vehicles had become extremely popular with the German Army and the Luftwaffe because of their practicability. It was therefore not surprising that, in a pre-war purge designed to standardise military transport and reduce the variety of types in use, half-tracks survived and continued in production.

*German Half-Track Vehicles of World War Two* traces the development of these vehicles from the first design of 1926 to the models that were in action throughout the war. Each vehicle is described in detail with regard to its evolution, component parts, performance and tactical role. There are interesting and useful appendices on manufacturers engaged in the production of half-tracks, aids to snow crossing performance and the conversion of armoured half-tracks to load-carriers. More than 150 black and white photographs provide students and modellers with many aspects of each of the vehicles described in a book that must take its place as an essential work of reference.

96 pages. 10" x 7¼". £3.95 (+40p p & p).

### AIRMEN OF WORLD WAR ONE. Men of the British and Empire Air Forces in old photographs

BY CHAZ BOWYER



Contemporary photographs, handsomely presented, here recapture the essence of Britain's first generation of fighting airmen.

Here are Britain's original sky-fighters at routine duties, resting, in combat — seen in the situations in which the photographers found them.

Complementing the illustrations are appendices that include a selection of the air services' own lyrics — sung to well-known tunes — reflecting the attitude of the youngsters who were risking and losing their lives in the first aerial conflict between nations; plus statistics on personnel and material strengths, aircraft produced, air stations and squadrons/units. 150 illustrations. 128 pages. 10 in. x 7¼ in. £4.50 (+40p p & p).

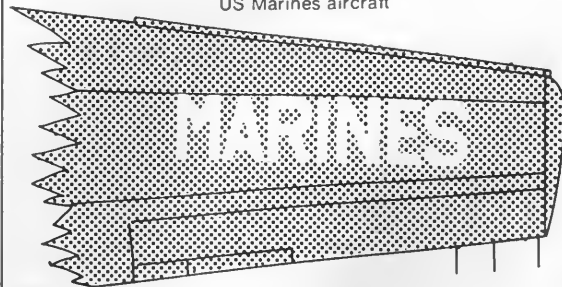
### How to obtain:

Booksellers who stock them include W. E. Hersant, B.M.W., A. A. Johnson, Ken Trotman, Bivouac, Under Two Flags, but if in difficulty please contact the publishers directly (with cheque plus extra sums indicated to cover post and packing).

### ARMS & ARMOUR PRESS

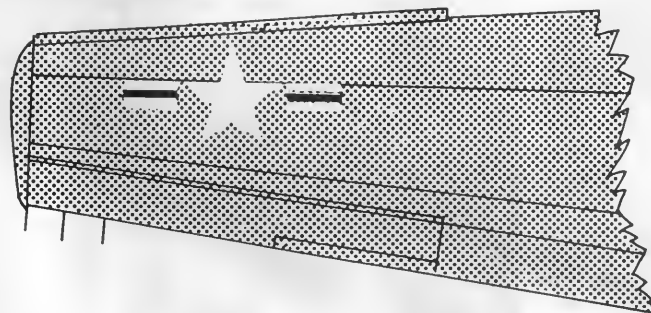
2-6a Hampstead High Street, London NW3 1PR

Port under side of  
US Marines aircraft



Fixed leading edge slot  
from 10 thou plastic card

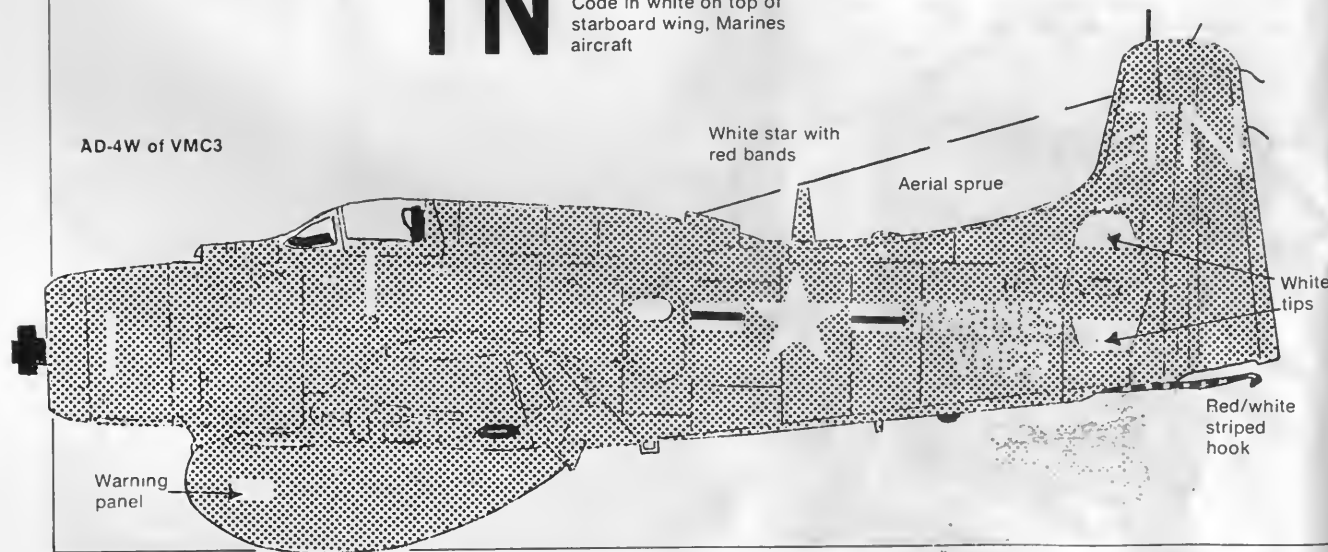
Port top side of Marines aircraft.  
Red bars on stars



**TN**

Code in white on top of  
starboard wing, Marines  
aircraft

AD-4W of VMC3



White star with  
red bands

Aerial sprue

White  
tips

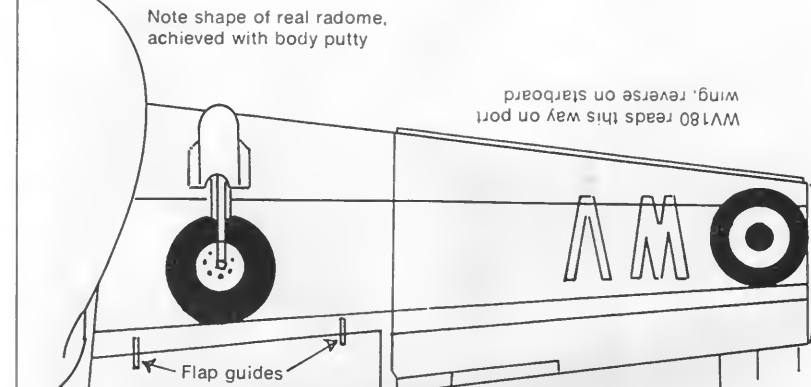
Red/white  
striped  
hook

Warning  
panel

1:72 scale

Drawings by Bryan Philpott

Note shape of real radome,  
achieved with body putty



WV180 reads this way on port  
wing, reverse on starboard



Wheel well filler  
from plastic card

Blister window  
both sides

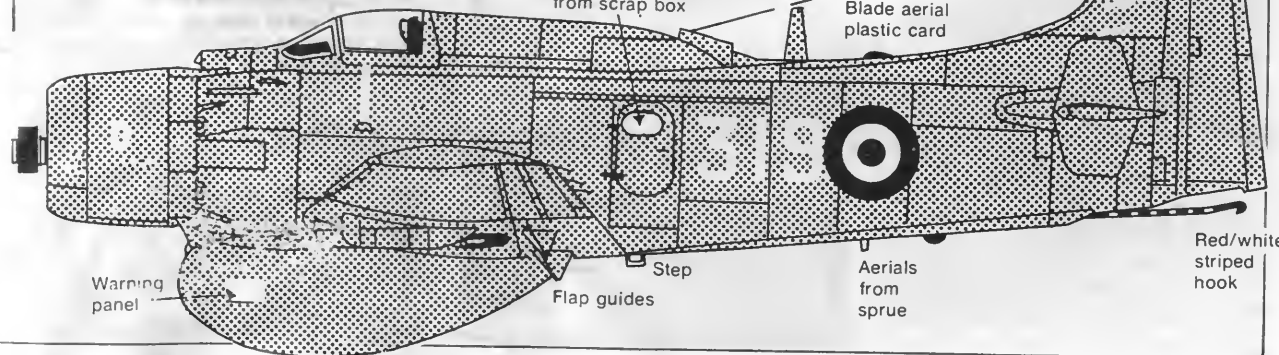
Auxiliary fin.  
Make two from  
20 thou card

AEW1 of 'D' Flight, 849 Squadron FAA

The four white bands on the  
fin are 'attitude' guides  
for the batsman

Blister windows  
from scrap box

Blade aerial  
plastic card



Warning  
panel

Flap guides

Step

Aerials  
from  
sprue

Red/white  
striped  
hook





Continued from page 158

support role, where its ability to absorb combat damage endeared it to the men who flew it, meant that, far from becoming an anachronism in an air force that was rapidly becoming all-jet equipped, it took on more and more roles as various as troop carrying, target towing, anti-submarine and airborne early warning (AEW).

The first AEW version was in fact a AD-1 modified with search radar in a ventral bulge, and this was followed by an electronic counter measures development. From these early experiments the AD-4W, which forms the basis of this conversion, was developed.

The AD-4N was fitted with APS-19A radar, a redesigned windscreen, an autopilot and a modified arrestor hook. In addition to this the intake for a petrol combustion heater that had appeared on the cockpit of the original 'radar' version was retained, and the crew complement became three; a pilot and two observers seated side-by-side in the rear compartment.

Production of the AD-4 version ended in 1953 when a total of 1,032 aircraft in a variety of forms had been manufactured. Of this batch 50 were supplied to the Royal Navy under the Mutual Defence Assistance Programme (MDAP) for use by the Fleet Air Arm who designated them AEW 1.

The Royal Navy started taking delivery in late 1951 and thus became the first country outside the USA to operate the type. Later on the French Armée de l'Air, the Republic of Vietnam and the Cambodian Air Force all received versions of the Skyraider.

Production finally ended in 1957 after a continuous period of 12 years during which 3,180 aircraft in seven versions and 28 variants had been delivered.

The last Skyraider was phased out of front-line service by the US Navy in 1969 but the aircraft was still in service with the South Vietnamese Air Force in late 1974 —

30 years after Ed Heinemann's initial sketches first saw the light of day.

The AEW 1 served with the Royal Navy from November 1951 until December 1960 when it was replaced by the AEW Gannet. It therefore has the distinction of being the last piston-engined aircraft — helicopters aside — in front line service with the Fleet.

Two Skyraiders were retained as museum exhibits and one of these can now be seen at the Fleet Air Arm Museum, Yeovilton.

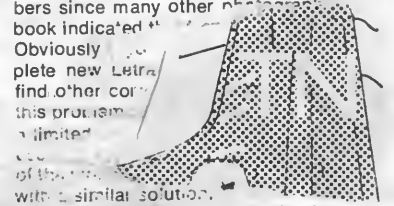
The most informative source available on Royal Navy Skyraiders is the monograph produced by the British Aviation Research Group titled *A history of the Douglas Skyraider AEW 1*. This book contains individual histories of all Skyraiders used by the Royal Navy, details of colour schemes, some excellent drawings by Richard Leask Ward, and a multitude of useful photographs. Any reader contemplating making the model would be well advised to beg, borrow or better still buy, this publication.

The aircraft chosen for this conversion — WV180 — first flew on December 21 1950 and served with the US Navy's VC12 Squadron until 1952. It served with 'D' Flight of 849 Squadron Fleet Air Arm and was eventually struck off charge in 1958. Its choice as a conversion subject serves to underline the use of the BARG monograph and I feel that my reasons for selecting this particular machine are worth recording.

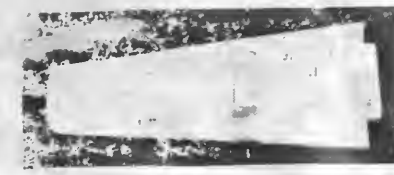
Although the actual conversion is not too

Folding wing detail is clearly visible in this shot of WT962 (Aviation News photo).

difficult most modellers will encounter problems when it comes to raiding the spares box for suitable markings. I happened to have several sheets of white Letraset with alphabets and numbers the correct size for the codes and underwing serials, but many of the characters had been used, so I spent a fruitful hour studying each picture in the book until I found an aircraft which had all the letters/numbers I had available, this turned out to be WV108 illustrated on page 41. The only problem I had was that the alphabets I had were of the 'squared' off type whereas the illustration indicated that at the time the photograph was taken WV180 had 'rounded' codes applied. Rightly or wrongly, I used journalistic licence and used the squared off numbers since many other photographs in the book indicated this. Obviously a complete new Letraset would be a find of other corners, but this problem is limited to a few characters. As stated earlier, the conversion is not too



Left Wing lower surface showing new wheel well being sanded smooth, and rocket locating holes filled with putty. Right Wing upper surface with joint line filled with putty.



AIRFIX magazine

difficult if it is tackled logically and slowly, but it is not one that should be attempted by the complete tyro. The task is made a lot easier if Airmodel conversion set number 109 can be obtained as this includes the radar dome and cockpit canopy; should you not be able to find this set there is no choice other than moulding a canopy and making a radome from balsa.

The Airfix kit is some years old but matches up with some of their more recent releases in quality and with a little attention to minor inaccuracies can be made into a good model of the A-1J which it represents.

I found that the best starting point was the wings as the minor work on these could be carried out quite quickly and left to set whilst the major work, which is centred on the fuselage, takes place.

Start by cementing two strips of plastic card inside the bottom portions (parts 20-22) covering the slots into which underwing stores fit. Next cement all parts of the wings together making sure that the joint where the fold is provided in the kit is cemented firmly together. That is, of course, unless you wish to make the model with wings folded. Fill the gun ports, underwing stores slots and fold lines with Green Stuff and leave this to set hard. I found it best to tape the wings to a flat surface thus ensuring that there was no 'kink' at the fold line when viewed from the front.

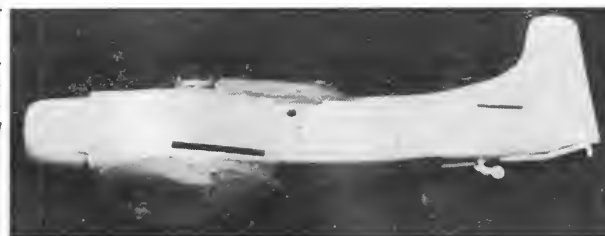
The plastic card liner inside the wing halves prevents filler from falling out and gives it a much more solid base. While the filler was drying I cut-out from 20 thou plastic card the two parts which fill the wheel wells. The AEW 1 had the same type of round uncovered wheel wells as the A-1E, so the rectangular wells with their doors provided in the Airfix kit have to be changed. Although the circular hole can be cut-out during this operation I found it best to completely block-off the kit wells and when the plastic card had set remove the circular section.

Leading edge fixed slots to counter the effect of aerodynamic disturbance created by the radome were fitted to the outer section and I made these from 10 thou plastic card fitting them in place where shown.

AEW1 of 'D' Flight, 849 Squadron, from a fine illustration will be a good guide to the work around the fuselage. They can be cut out to fit around the fuselage. The work is completed at this stage.

instructions leaving out the rear section of part 2 although this is not vital if you wish to retain the strength added to the structure by incorporating it. When the halves are thoroughly set, remove the top decking 1/4 inch back from the rear of the cockpit opening with a razor saw. This work must be done carefully as the cuts on both sides of the fuselage must be parallel to each other. It is probably best to make a rough cut just above the final line and finish the job by filing across both halves with a flat file. The dive brakes (parts 34, 35 and 32) are cemented in position and all signs of them

Fuselage assembly showing radome in place with Green Stuff yet to be sanded smooth.



Fuselage assembly showing new cockpit in place before final sanding smooth.



Underside view of half-completed model with all filler sanded smooth. Note especially the new wheel well shape and the fillets on the tail-planes.



Profile view of model at same stage.



hidden by filling the join lines with Green Stuff. Holes for the blister windows are now drilled on both sides of the fuselage, these are located at the top left hand side of the dive brake join. The new cockpit canopy is fitted from the Airmodel kit but if this is not available cement a block of balsa to the fuselage and carve it to the required shape. This block will then be removed and used as the male mould for the forming of a canopy

from clear acetate.

The radome in the Airmodel kit is not strictly accurate in shape but this can easily be rectified by cutting it out, sanding the two edges flat and cementing them together so that the rear portion of the lower section fits inside the rear of the top section. Build up the location fairing for this on the bottom of the fuselage with plastic card then cement it in position. Once it has set, the rear sec-



Above WT953 'J' of 849 Squadron comes in to land, probably on Ark Royal (Aviation News photo). Below Side view of author's completed model.

tion already mentioned is filled with Green Stuff which is worked into the reverse camber and gradually built up until the correct shape is achieved. Once again if the Airmodel kit is not available a shaped balsa block will have to take its place.

If you do use balsa wood for this part, don't forget to treat it with grain filler once all the shaping has been done, otherwise the wood will simply absorb any paint that is applied and the end result will look terrible.

The major work is now over but there is still a lot to be done and the desire to rush too quickly ahead must be curbed. At this stage I cemented the wings to the fuselage and left the whole assembly for 24 hours before filling any small gaps and sanding the completed sub-assembly smooth. The engine, front cowling and propeller were all fitted at this time and attention was then turned to the tailplanes.

The AEW Skyraider had auxiliary fins added to compensate for the increased side area of the aircraft. These were cut from 20 thou plastic card and two slots cut into the kit tailplanes from the leading edge to the elevator line were made to accept them. I used a razor saw for this operation but made no attempt to sand the finlets to an aerofoil section until they were firmly cemented in place, and any gaps where they joined the tailplanes were filled with Green Stuff.

The tailplanes are now added to the fuselage and any gaps filled and sanded smooth. Before adding fine detail to the basic structure make sure that it is smooth and all gaps have been filled. I found it best to apply a matt white undercoat at this stage as this is one of the surest ways of discovering if join lines, blemishes, dents and gaps are properly hidden.

Once satisfied that the model is as neat as you can make it, add the main undercarriage, the aerial behind the cockpit, and the four triangular flap guides beneath the wings.

The multitude of whip aerals and other blade aerals can be fitted after a study of photographs to determine their position as far as the model you have chosen to make is concerned. I make all whip aerals from sprue and fit them as the last operation of all when painting and application of markings has been completed. Do this by simply drilling small holes in the correct places



before painting the model then dab the sprue into PVA white glue before inserting it into position. This glue dries transparent and is easily removed from painted surfaces if you are too liberal with it. The static discharge wicks at the wing tips and fin top were added in this way and painted the correct colour after they had set.

Inboard wing tanks were carried by the AEW 1 and these can be made from scrap or borrowed from another model if you decide to fit them. If you do this then the pylons must be scratch-built as those provided in the kit are not the correct shape.

The aircraft was painted Sea Blue Gloss overall and the white trim around the cockpit as well as the markings on the cowlings and fin were white Letraset lining. Roundels came from the Sea Hawk on Modeldecalsheet 18, which also provided the white 'ROYAL NAVY' on the fuselage. To date I have not found any letters/figures small enough for the serial and am still looking as I am rather reluctant to try hand-painting at this size. The Flight letter 'D' on the cowlings as well as the 'CU' for Culdrose on the fin was also Letraset, to get the 'squared' off letters I painted out the rounded corners

with Sea Blue Gloss after they had been applied. The 'U' in 'CU' was made with the bottom painted in, application. Underwing serials, the high and should present in the finding than the amateur also used, raset but Yeoman was not to buy to find them - will s. hand paint, or stuck, by choosing alphabets/numbering off and hand-painted, but if you are too irksome a task. The study of photographs and the BARG Monograph will prove worthwhile.

This is a challenge, but well worth working at, as the end result will be a model that cannot be called elegant but has a certain purposeful air about it, which is sure to gain more than a second glance from other enthusiasts.

Apart from the BARG Monograph other useful details on the Skyraider can be obtained from Profile No 60; *The World's Fighting Planes* by William Green; *Aircraft of the Royal Navy*, by Owen Thetford; and the American Magazine *Scale Aircraft Modeller* Vol 2 Nos 2, 3 and 4, published in

AIRFIX magazine

## 3 Great Tracked Vehicles for you!

### U.S. TANK DESTROYER M10

**THE WOLVERINE**  
First used against Rommel's Pz III and IV units in Tunisia, the M10 was built around the engine and suspension of the M-4 Sherman. These vehicles went into action with strong infantry protection as the turret was open on top to allow quick access to the 76 mm cannon, thus making them vulnerable in close support action to mortar or grenade attack. This superb model by TAMIYA may be finished to the standard of collectors items, so accurate is it in detail and quality of decals.  
Price £2.99.



## RUSSIAN TANK T34 76



**1942 PRODUCTION MODEL**  
The "Queen" of Russian armour and the root from which modern Soviet Tank forces stemmed. The T34/76 was considered by some experts to be the finest tank in action in WWII, prior to the production of the Panther. The Germans praised it as the best mid-war tank and made it the model for their famous Panther. This model from TAMIYA is all that you have come to expect from this famous manufacturer. This version has the long barrelled 76.2 mm gun and the kit includes a Commander and a soldier figure. Complete end accurate decals are supplied together with full painting instructions. Price £2.50.

### GERMAN 8ton HALF TRACK 20mm FIAK VIERLING Sd.kfz 7/1



This versatile tractor with its 6 cylinder Maybach 130 bhp engine so impressed the British Army that they carried out tests with one captured in Libya and then asked Vauxhall Motors Ltd., of Luton to develop a similar vehicle. It was standard equipment of the fast advancing German armies in most campaigns of WWII. With its 20 mm four-barrelled AA gun firing 250 rounds per second, it became the scourge of low flying aircraft. This beautifully produced kit includes all accurate decals and a Commander figure. Carrier, Tracker, Left loader and Right loader. Price £3.80.

**RIKO** RICHARD KOHNSTAM LTD., 13-15a HIGH STREET, HEMEL HEMPSTEAD, HERTS.





# british army uniforms 1660-1900

## The Regiment of Marines by Bryan Fosten

DURING THE COMMONWEALTH it became common for infantry soldiers to be added to the complement of ships to give added fire-power to the Navy. In 1664 His Majesty King Charles II confirmed the practice by making an Order in Council which directed the raising of a new regiment which was to be specifically trained for service with the fleet. The order read as follows: '... that twelve hundred land souldyers be forthwith rayased, to be in readinesse to be distributed into his Mats., Fleets, prepared for sea service ...'



Before the raising of the regiment was officially decreed, Charles had seen the value of having detachments of soldiers on board the warships. Small elements of the First Foot Guards had already served in this way and had proved so successful that it was inevitable that some addition to the permanent establishment would be ordered. The new regiment was known as either 'The Duke of York and Albany's Regiment', 'The Lord High Admiral's Regiment', 'The Lord High Admiral's Maritime Regiment of Foot', 'The Regiment of the Duke of York' and later, simply 'The Regiment of Marines'.

The unit was strong, commanded by a Colonel together with a Lt Colonel and a Sergeant-Major and was divided into six companies each of which was 200 strong.

Each of the companies was commanded by a Captain with a Lieutenant as his second in command. Each company Colour was carried by an Ensign and the companies had four sergeants and four corporals.

Nathan Brook in his *General and Compleat List of the Military Review at Putney Heath in 1684* describes the uniform simply as: '... Yellow Coates, red breeches, red stockings, and hats bound with gold coloured braid ...'. A French writer later described the dress as: '... le long habit de drap beige boutonnant droit, relevé de rouge aux parements en botte, avec veste, culotte à long bas attachés sous le genou également rouge; et comme coiffure le chapeau de feutre en usage ...'. This adds little except to tell us that the waistcoat was also red. During the Dutch Wars the Regiment served with the fleet with one company detached and serving ashore under the Vicomte de Turenne in the Netherlands.

The superior quality of the regiment was recognised by the issue of firelocks to all the companies although the élite grenadiers, raised in 1685, were probably armed with light weapons.

The regiment was well thought of and it was retitled 'The Regiment of the Prince of Denmark' in 1685. It was disbanded in 1689. During its later life the uniform was changed to red faced yellow with dark grey breeches and white stockings.

With the very limited contemporary information available we will now attempt a rational reconstruction of the uniforms. The principal characteristics of mid-17th century military dress will be retained in the

*A Captain of the Regiment of Marines, 1690.*

with the distinctions one would normally expect for Officers, Sergeants, Corporals and Drummers at this time.

## The Officers

At this period there was little uniformity in dress and within reason the officers dressed as they pleased, retaining the fringed sash and the gorget as the principal outward indications of their military status. However, with a regiment having such a showy uniform it would be expected for at least some of them to wear the same coloured clothing affected by their men.

Fawn, flat-brimmed felt hat bound with gold lace, with a red ribbon and large drooping red dyed ostrich feather. Yellow velvet coat with deep scarlet velvet boot cuffs. The coat lined red and much decorated with gold lace and embroidery and with dozens of gold wire buttons. Long scarlet waistcoat and scarlet breeches and silk stockings. The breeches fastened below the knees with yellow ribbons. Black shoes with high tongues and red heels and red ribbon rosettes. Around the waist a crimson-red taffeta sash edged and fringed with gold. Sword carried on a crimson baldric much decorated with sprays of gold embroidery. The Captains wear very large gilded gorgets supported on red ribbons, their Lieutenants polished black gorgets studded with gilt.

## Ensigns

Dressed much as their seniors but with simpler lace and embroideries. The senior carries the plain yellow Colonel's Colour, the next senior the Lt Colonel's Colour which is also yellow but with a red St George's cross outlined in white, and the next that of the Major which resembles the Lt Colonel's Colour but with yellow flames issuing from the internal corners of the cross outlined in white. All the remaining Ensigns carry the Captain's colours which resemble the Major's but with no flames. Their rank is distinguished by their silver plated gorgets.

## The Sergeants

Black felt hat cocked up one side, and trimmed with gold braid and with a red ribbon tied in a bow. Yellow coat with red cuffs, red waistcoat, red breeches and red stockings. Brass buttons. A narrow gold edging to the cuffs and down the front edges of the coat and breeches. The arm seams at the shoulder, yellow ribbons at the cuffs and red rosettes on the shoes. His equipment consists of a wide brown leather bandolier with a oval brass buckle and a large strap on frog which supports an infantry hanger. He wears a crimson waist-sash and a sword on the left hip and carries a halberd with a red horsehair fringe below the blade.

## Corporals

Dressed as the sergeants but without a red ribbon in the hat, no waist-sash, no gold lace on the coat but possibly a red looped cord on the right shoulder. This looped cord was the later distinction of the Corporal but



Private of a Marine regiment, 1685-90. Although armed with the firelock or snap-haunce musket, he still carries the shoulder belt with cartridge bottles, a powder flask and small leather bag for ammunition.

carry fusils instead of the partisans carried by the other officers.

## Drummers

Dressed in red faced yellow with yellow waistcoat, breeches and stockings and with yellow ribbons on the hat and red ribbons at the knees. Drum yellow with red rims.

In 1690 two further Marine Regiments were raised. In this case their duties were clearly to be that of maritime soldiers for the title of the regiments left no doubt. Both 'Torrington's and Pembroke's Marine Regiments' comprised 12 companies, all armed with good snap-haunce muskets, and three companies of Grenadiers complete with grenade pouches and hatchets. These regiments were to be dressed in blue, lined (ie cuffs) white and all had grenadier caps. Later their uniforms were also changed to the ubiquitous red faced with blue and green respectively. These two regiments were amalgamated in 1698 and the regi-

*Continued on page 170*



*Sergeant of Marines in the soft felt hat. He is holding the tasselled halberd.*

is admittedly pure conjecture whether they would have worn this decoration at all at this period. It seems likely that the only distinction of a Corporal was to wear slightly better quality clothing. The equipment comprises a brown leather bandolier with red painted charging bottles on yellow cords, a brown leather bullet bag and a powder flask. The brown leather waistbelt supports an infantry hanger and a plug bayonet.

## Privates

Dressed and equipped as the Corporals.

## Grenadiers

Tall brown fur caps with red horsehair bags with yellow tassels. The yellow coats much decorated with red point-ended lace with tassels. The equipment consists of a wide brown leather bandolier supporting a large bomb pouch and a waistbelt supporting a powder horn, plug bayonet and hanger. The Grenadier officers wear the same type of headgear as their men and





Continued from page 167

ments of Colonel Dalton, Colonel Mordaunt and Colonel Seymour were then converted for maritime service. By the turn of the century they were also disbanded and it was not until 1702 that a further six regiments of Marines were raised.

These were the regiments of Colonel Saunderson, Colonel Villiers, Colonel Fox, Colonel Mordaunt, Colonel Holt and Colonel Shannon. At the same time six further regiments with the odd requirement that they were to be 'soldiers for sea service' were raised. In Cannon's History there is the first reference to the high crowned grenadier caps which were to be shown for all Marine Regiments in the 1742 Clothing Book. Little further information remains of the uniforms of these early corps. Villiers certainly had yellow facings, Fox's green, Shannon's yellow and Holt's grey.

All these regiments were disbanded in 1713.

Sources: Field's Britain's Sea Soldiers; Lawson's A History of Uniforms of the British Army Vol 1; Edey's Historical Records of the Royal Marine Forces; and Cannon's History of Marine Regiments. □



A typical cap and coat of grenadiers of the period. A Marine grenadier would have been dressed very much the same as his regular Line contemporary.



## in the field

Terry Gander

### Modern British self-propelled artillery

EVER SINCE THE idea of the integrated armoured division was first mooted during the 1920s, the role of the artillery in that formation has never been clearly defined. The first ideas on the equipment required for the armoured formations intended for a mobile, mechanised war suggested that the tank alone could provide its own fire support and this conception was carried as far as 1939 and 1940 when the German panzer divisions used only their shock and surprise qualities and neglected the artillery, relying on air support and conventionally-towed artillery only in set-piece breakthroughs and pitched battles. The early panzer campaigns soon showed the need for an organic artillery element within each tank formation and until 1945 there were many improvisations and attempts to include a measure of mobile tracked artillery in panzer divisions.

The progress of the war also showed the need for self-propelled artillery to the British Army but its introduction was slow and beset by many difficulties, not the least

of which was the definition of the exact role that self-propelled artillery would have to play in modern war. Some protagonists saw tracked artillery as a full component of the armoured division, but others saw it only as a handy form of mobile artillery able to carry out a wide range of tasks, many of which would be in a traditional infantry support role. These two views were never really reconciled before 1945 and this uncertainty gave rise to such unfortunate projects as the 25 pdr gun mounted on a Valentine chassis that could not perform either as an effective field piece or a useful tank gun. The Sexton (a 25 pdr mounted on a redesigned Canadian Ram chassis) was probably the only viable British self-propelled artillery vehicle to see extensive service during and after the war, but otherwise the British Army came to rely on a long string of American self-propelled artillery vehicles for their artillery component in armoured formations.

Today, in 1975, the reliance on American

self-propelled artillery continues, although it must be said that this reliance is not one of necessity, but one of choice, for the vehicles concerned are among the best of their kind available. The Royal Regiment of Artillery makes use of four artillery pieces mounted on three self-propelled carriers.

At the lower end of the scale is the British-designed and built Abbot. Mounting the 105 mm L109 gun, the Abbot (FV 433) now forms the main field artillery component of the field regiments based in Germany. (There are no conventionally-towed artillery units in use by BAOR, and any such units can expect to serve elsewhere with the peace-time Army.) The gun used on the Abbot fires the same ammunition as the 105 mm Light Gun and has a range of up to 17,500 metres. It fires a shell weighing 35 lbs (15.9 kg), and there are six different versions of ammunition to choose from. The gun is mounted in a totally enclosed turret with a 360° traverse. This turret not only gives protection against shell splinters and small-arms fire but also gives a measure of protection against nuclear fall-out and bacterial or biological warfare. For secondary armament the Abbot uses a roof-mounted 7.62 mm machine-gun on the roof cupola. Serving in Canada on the British Army ranges are a small number (four) of Value Engineered Abbots which have been stripped of all luxuries such as wading gear and the like. This version is the export model as sold to India.

The next vehicle up the scale is the massive American M109 Howitzer. Production of this vehicle began back in 1962 and the



type has since been built in large numbers for use by many armies both in NATO and elsewhere. Like the Abbot, the howitzer is mounted in a 360° traverse turret with full overhead protection. Range of the piece is 14,600 metres and the shell weighs 95 lbs (43.1 kg). The main thing that strikes the observer when watching the M109 in action is its bulk, but it can still use flotation equipment to cross rivers. Just coming into service with the British Army is a small number of M109A1 vehicles which have a longer barrel and some chassis changes which together enable a range of 18,000 metres to be reached.

At the top end of the calibre scale come the M107 with a 175 mm long-range gun, and the M110 mounting an 8-inch howitzer.

Both of these weapons are mounted on the same chassis. Unlike the previous two weapons, the M107 and M110 both use exposed mountings with no protection against weather, fall-out etc, other than canvas shields, but in action they are usually emplaced so far to the rear that such hazards are unlikely to place them inoperative. Neither piece has a traverse greater than 30° left or right, but both use power hoists to handle the projectiles they fire. The 175 mm M107 fires a 147 lb (66.7 kg) shell to a range of 32,800 metres, and is thus often referred to as the 'Long Rifle'. The 8-inch M110 howitzer fires a 200 lb (90.8 kg) shell to a range of up to 16,700 metres but it can fire a nuclear shell to a range of 14,500 metres. There are relatively few M107 and M110 vehicles in British Army service (for instance there are only 12 M110s) and most serve in Germany with BAOR — those in this country are in use for training and similar roles.

As has already been said, the bulk of the British self-propelled artillery now serves in Germany where it is used in support of the armoured formations and also gives fire support to other field units, mainly the infantry which is also mobile. The present self-propelled range of artillery can carry out any duty it is likely to be called upon to perform but note will doubtless have been made of the experiences of artillery in the recent Middle East conflicts. There it has been found that the 105 mm calibre is no longer an economic self-propelled weapon in modern war as its relatively small shell is of little use against well spread-out mobile targets such as tank columns, even when fired en masse. The 155 mm projectiles did show themselves to be very effective at breaking up armoured attacks at long range and are thus now considered the smallest calibre likely to be considered for future projects.

This trend has already been foreseen by NATO planners for their next major artillery piece, the FH70, is a 155 mm gun, and already plans have been made to mount it as a self-propelled piece as the SP70. This project is a joint German/UK undertaking with the Italians taking an interest. The first guns have completed their trials but the self-propelled version is progressing more slowly. □



Left M107. Below left M110. Below M109. Above right Abbot.



DATA	Abbot	M109	M107	M110
Calibre	105 mm	155 mm	175 mm	203 mm
Crew	6	8	11	11
Range	17,500 m	14,600 m	32,800 m	16,700 m
Shell weight	15.9 kg	43.1 kg	66.7 kg	90.8 kg
Traverse	360°	360°	60°	60°
Elevation	70°	75°	65°	65°
Depression	-5°	-3°	-2°	-2°
Ammunition carried	40 rounds	25 shells	3 rounds	2 rounds
Weight loaded	16,556 kg	23,786 kg	28,168 kg	26,543 kg
Cruising range	390 km	360 km	725 km	725 km

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# squadron codes and colours 1939-1956



By Michael J. F. Bowyer and John D. R. Rawlings

## LJ 3rd Gunnery/Tow Target Flight, USAAF (c)

Used on an assortment of types including Lysander, P-47 and A-31 in 1944-45.

## LK 87 Squadron (c)

Letters used September 1939 to December 30 1946 successively on Hurricane 1s, eg LK:K-L1790, IICs (June 1941-March 1944), eg LK:Q-BD833, Spitfire VB/VCs (April 1943-August 1944), eg LK:Y-JK781, Spitfire IXs (June 1943-June 1944 and August 1944-December 1946), eg LK:P-MK902 and LK:M-NH346.

## LK 578 Squadron (c)

Formed January 14 1944 from 'C' Flight of 51 Squadron. Used on Halifax IIIs, eg LK:M-MZ511. Disbanded April 15 1945.

## LL 91st Bomb Group (c)

Used on B-17s of 401st Bomb Squadron December 1942 to June 1945.

## LL 1513 Radio Approach Training Flight (c)

Used on Oxfords, eg LL:B-NM250 and Ansons, eg NK147, NK213, at Bramcote from 1945 until disbanded in October 1946.

## LM 1 Fighter Group, USAAF (c)

Used on P-38s of 71st Fighter Squadron September 1942 to December 1942.

## LM 56th Fighter Group (c)

Used on P-47s of 62nd Fighter Squadron January 1943 to October 1945.

## LM Station Flight Elsham Wolds (c)

Post-war allocation confirmed.

## LN 99 Squadron (c)

Letters used September 1939 to February 1942 on Wellington 1, 1A, 1Cs, eg LN:K-R1492. Given up when squadron proceeded overseas.

## LN Unit Identity unknown.

A Spitfire IX squadron is known to have worn LN coding.

## LN 100 Bomb Group (c)

Letters worn by B-17s of 350th Bomb Squadron March 1944-May 1945.

## LN 83 Group Comm Flight (c)

Allocation confirmed, details not known.

## LN Unit Identity not known

Reported in use on Blenheim IVs in 1944, possibly misreading for LW?

## LO 602 Squadron (c)

Letters used September 1939 to disbandment on May 15 1945 successively on Spitfire 1s, eg LO:E-X4722, Mk IIAs (May 1941-August 1941), eg P8396, Mk VB (August 1941-September 1943), eg LO:A-AA910, Mk

VCs (October 1942-April 1943), Mk VAs, Mk VIs (September-November 1942), Mk IXs (September 1943-January 1944, March 1944-November 1944), eg LO:Y-MH713, LF VBs (January-March 1944), eg BM271, Mk IXC's (August-September 1944), eg PL213, Mk XVIs (November 1944-May 1945), eg LO:A-SM350. Used again 1949-50 on Spitfire F22s and Harvard T2Bs, eg LO:X-KF584, and later on Vampire 5s, eg LO:C-VZ812, between 1950 and at least 1954.

## LP 8 OTU (c)

Formed May 18 1942 at Fraserburgh as the PR OTU using Spitfires and Masters Mk's II/III. Later had Mosquito IV, Marylands, eg AR740 and Beaufighters. In January 1945 moved to Haverford West. Had previously used individual numbers of aircraft identity, not letters, eg Mosquito '86':DK319. Codes may date from the post-war period only.

## LP 237 OCU (c)

8 OTU became 237 OCU on July 31 1947. Used Spitfires and mainly Mosquitoes, based at Leuchars and Benson. Letters LP

followed by a number identity, eg Oxford EB813:LP-73, Spitfire XIX PM621:LP-84, Meteor T7 WA667:LP-66.

## LQ 450 Squadron (c)

Formed April 23 1941 with Wellington IIs, eg LQ:M-W5496. Received Halifax IIs (April 1942-September 1943), eg LQ:M-W7704. Used Lancaster I/IIIs from August 1943 to June 1945, eg LQ:M-PB402.

## LR 1667 Heavy Conversion Unit (c)

Formed Lindholme with Lancasters and Halifaxes June 1 1943. To Faldingworth October 8 1943 and Sandtoft February 18 1944. Disbanded November 10 1945. Example Lancaster LR:J-PD444. See also GG.

## LS 15 Squadron (c)

Used September 1939 to April 1951 successively on Battles, eg LS:Y-P2177, Blenheim IVs, eg LS:Q-L8852, Wellington 1Cs, eg LS:H-R1218, Stirling Is, eg LS:F-R9302, Stirling IIIs, eg LS:V-BF579, Lancaster I/III LS:C-R5508, Lincoln LS:A-RF370 and Washington LS:D-WF505.

## LT 22 OTU (c)

Formed Wellesbourne April 14 1941 with Wellington 1Cs. Later used Wellington IIIs, eg LT:C-DF578 and Mk X. Also used on Martinets, eg LT:R-HP447 in 1944. See also DD.

## LU Merchant Ship Flying Unit (c)

Based at Speke using Hurricanes forming a pool for CAM ships. Example: LU:S-W9313.



Above Stirling 1 LS:E of XV Squadron during a Circus operation in the summer of 1941. The aircraft is N3658 which joined the squadron on May 13 1941 and was lost on an Essen raid on August 7-8 1941. The escorting Hurricanes belong to No 71 (Eagle) Squadron. Below: Wellington 1C LS:B-T2624 of XV Squadron at Wyton in the winter of 1940-41.



AIRFIX magazine

# NEW kits and models

## Monogram B-17G

DURING THE last nine months there have been increasing signs of a revival of interest in 1:48 scale, or 1/4 inch models as the Americans prefer to call them. The recently introduced Tamiya Lancaster in this scale has proved popular and more than a few avid 1:72 scale builders have decided that they must build this kit. Those who are still not convinced will find it even harder to resist the Monogram B-17G which is shortly to be released in the UK.

This kit is a classic example of Monogram's standards and there is really only one adjective, SUPERLATIVE, to describe it.

The model is very accurate and the mouldings are well worth a prolonged study to see just what component parts should look like. The fuselage interior is fully detailed with internal structure and fittings moulded to both fuselage halves. The cockpit, navigator's and radio operator's compartments have a wealth of detail and the assembly and painting of these parts can take as long to complete (if done properly) as the average 1:72 scale model. There is still room for scope for the super detailist in the adding of ammunition belts, wiring harnesses and other equipment, but generally speaking the components provided will be more than adequate for the average modeler. If in fact there is such an animal.

As one would expect from Monogram the components fit well and there is hardly any need for filler except on the top of the fuselage where the canopy fits. The comprehensive construction booklet must be studied at length as it is important that some steps are taken in the order recommended by the manufacturers. If the instructions are followed few problems will occur, but the one that will face most modellers is the rather tricky operation in fitting the astrodome (part 67).

As it is necessary to fit all the fuselage guns inside the structure during initial assembly, final masking before painting is tricky especially if you don't want to be continually breaking off the gun barrels. But if care is taken as the watchword then this does not present as big a problem as one might expect.

The finely detailed exterior lacks any gimmicks such as retracting undercarriage legs, moving control surfaces, etc, and one nice touch is the unique method of positive locking of the wings.

Transparencies are beautifully clear and the markings provided are for an overall natural metal as well as an olive drab/neutral grey machine.

The kit contains a colour illustrated four-page leaflet on diorama building (as did the

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company's P-61), and there is also a loaded bomb trolley and USAAF personnel, to encourage the modeller to try this method of display.

The B-17G is sure to be popular and must be well in the running for the 'Kit of the Year' title.

The sample was kindly supplied by Monogram, and at the time of going to press the UK price is not known.

## Matchbox M16

THE M16 CONSISTS of four .50 calibre machine-guns M2, HB (TT) in a Multiple Mount M45, mounted on a half-track personnel carrier M3. The mount, known as the Maxson turret, was similar to that used on the Multiple GMC M13 but modified for four instead of two .50 machine-guns. The Matchbox kit represents this weapon on the ubiquitous half-track and is to the usual standard of detail and clean moulding.

Neat touches are the separate doors which can therefore be cemented in place open or closed and the diorama base representing a damaged railway line between banks.

The crew of the M16 was a commander, driver, two loaders and a gunner, of which only the latter is included in the kit. The folded down hull top sides could be improved with an overlay of 10 thou plastic card as they are not quite prominent enough.

As this kit represents the White or Autocar



type with rounded mudguards and riveted construction it complements the Airfix version which has International type 'square' mudguards. There should be endless permutations to keep the conversion addicts happy. Transfers are for the 5th US Armoured Division or 2nd US Armoured Division. Price is 30p.

## Matchbox Puma

MOULDED IN light and dark grey, the 1:76 scale Matchbox Puma 8x8 armoured car is another must for every collection and this new kit is a very attractive product. It also has conversion potential to the SdKfz 234/4 by utilising parts from the Airfix kit. Transfers are included for Puma of IX SS Panzer Division or XI Frw Panzer Grenadier Division. Price is also 30p.

## Prince of Wales and Duke of York

REVELL HAVE produced generally accurate if somewhat basic kits of two more 'King George V' class battleships, *Prince of Wales* and *Duke of York*, and predictably they are re-tooled versions of the original 1:570 scale release, *King George V* herself. Happily, the manufacturers have done their homework pretty well and the minor differences around the fore topmast and in the distribution of the close-range armament have been incorporated in the kits. It's a pity that some of the inaccuracies in the first kit have not been attended to, however, since we still have an armour belt that is too high and too short, anchors that are set too low, and barbettes that are too small in diameter.

The *Prince of Wales* is represented in late 1941 configuration, with 2 pdrs on 'B' and 'Y' turrets in place of the UP mountings carried during the *Bismarck* action, and the Type 271 radar lantern on the forward superstructure. The single 20 mm guns carried at the time of her loss are not included. Painting instructions give both port and starboard views for the disruptive



camouflage worn during this period, and the pattern is generally accurate.

The Duke of York kit is offered as the ship appeared in late 1942/early 1943, with fore- and quarter-deck 20 mm positions and Type 273 radar on the foremast. The paint scheme is open to question here, since it seems probable that the weatherdecks were painted a medium grey during this time instead of the 'tan' advocated by Revell.

Construction of both kits is very straightforward, but quite a bit of trimming is required before the parts are assembled. The really enthusiastic modeller will no doubt spend many hours adding the considerable amount of detail necessary to produce top-class models, since all the parts are very much simplified and many are overscale. Price of each kit is £1.10.

## Minifields

THE LATEST SET of decals to reach us from Aviation Historical Associates, 41 Reforme, Portland, Dorset, is a sheet of German minifield warning notices for incorporation in dioramas and wargames. To 1:76 scale, the sheet contains six of the black notices with the lettering 'Achtung, Minen' and 'death's head' device. A 1:35 scale set will be available shortly. Price is 30p plus 14p postage from the above address or from Ren-Models of Cambridge.

## Revell Bf 110C

WHEN REVELL released their 1:32 scale Bf 110G they came in for some criticism over certain parts, it is good to see that they appear to have taken some heed of previous reviews by incorporating changes in the kit which has now been re-released in the Bf 110C-4/B fighter or fighter/bomber version.

Now moulded in a deep khaki colour, the kit has, of course, been changed in the areas where this version differed from the 'G' model. One point missed, however, is that the Bf 110C was basically a two-seater but the kit retains the same moulding from the night fighter version for the cockpit floor, so there is a third seat included. Surface detail is good, especially the fabric-covered rudders which retain the protruding trim tabs that were not usually seen on the versions depicted, it is but the work of a few moments to remove these parts.

The underlying bomb racks and accompanying bombs are well moulded and accurate whilst the propellers and spinners are very impressive.

Component parts fit well and on the review sample there were very few gaps that needed filling.

The kit makes up into a very impressive model and the choice of markings enables two versions of aircraft operated by Zg 1 Wespenn Geschwader to be depicted. The decal sheet is very well printed but care must be taken in applying the dramatic Wasp emblem to the nose. The sheet contains instrument panels as well as a plethora of stencil markings.

This is a fine model that will enable the dedicated Luftwaffe fan and 1:32 scale modeller to happily while away many of the dark winter evenings.



Another new release in 1:32 scale from Revell is a P-38J 'Droop Snoot' Lightning, shown here in a manufacturer's hand-out photo. The model features a removable cowling on one of the engines and would appear to be good value at £2.35, but we shall be reviewing it in more depth in a future issue.

## Daimler a/c

BANDAI'S LATEST offering in their 1:48 scale military vehicle series is sure to prove one of their most popular models yet, depicting as it does the British Daimler Mk 1 armoured car.

Cast in sand-coloured polystyrene to this firm's usual high standards of detail and crispness, the kit enables a model to be built up with considerable interior detail, including the engine and transmission system, driver's compartment and controls, 2 pdr gun breech and turret ring with shell racks. Driver and commander figures as well as two additional personnel are also provided.

The instruction sheet is very clear indeed, and all components are labelled with the appropriate colours for painting before assembly. A good selection of divisional and regimental insignia are also included on the decal sheet, but unfortunately with no guidelines as to what goes with what apart from two examples shown in photos.

Altogether, though, a very attractive kit of a particularly popular subject. Our review sample was kindly supplied by Jones Bros of 56 Turnham Green Terrace, Chiswick, London W4, who can supply this kit for £1 plus 35p postage.

## Austin K5

BANDAI'S SECOND new release in their 'British armoured division series' depicts the versatile Austin 3-ton 4x4 K5 truck, and is also to 1:48 scale. Crisply moulded in khaki-coloured plastic, it incorporates the usual engine, transmission and cab interior detail, plus four British army figures in shorts with accompanying separate pieces of equipment, weaponry, etc.

Although the basic model is extremely attractive and all parts fit together well, the kit falls down badly in its representation of the canvas tilt over the rear portion of the body. This should be discarded (it would make a good 1:76 scale pill box or bunker!), support frames built up from plastic card (fortunately there is a clear photograph showing these in the instruction leaflet), and the canvas tilt itself represented by tissue paper or similar.

This fault apart, the model overall represents good value for money at £1 plus 35p postage from Jones Bros of Chiswick. It is especially nice to see some more attention being devoted to 'soft-skinned' by the manufacturers after all this time.

## Hasegawa trucks

THE EVER-EXPANDING range of Hasegawa 1:72 scale kits of military vehicles now includes three versions of GMC truck. Number 20 is the GMC CCKW-353 Cargo Truck, number 21 the GMC Gasoline Truck and number 22 a Dump Truck. The chassis, axles, wheels and cab assemblies are common to the three versions and different parts are included for the various 'body' styles.

As with all the kits in this series parts are cleanly moulded, in this case in hard olive drab plastic. Although not to the usual AFV scale of 1:76, only the pernickity would notice the difference. Reasonably priced at 40p from Ren-Models of Cambridge (though check that there has not been an increase recently), they represent good value especially as there are so few soft-skin kits available anyway. Their use in airfield dioramas is obvious and for wargames enthusiasts they should help ease the 'supply' problem.

AIRFIX magazine

# MODELS

## PLASTIC KIT SPECIALISTS—ASSOCIATE MEMBER I.P.M.S.

### MODELDECAL DECALS

1/72 SCALE

All listed sets available:

- 1: BAC Lightning Mk. 1A, 2 and 6 (six alternatives in RAF service).
- 2: F-4 Phantom (VFMA-331, USMC; 497th TFS, USAF and 767 Sqn., RN).
- 3: N.A. F-100D Super Sabre (four alternatives in USAF service).
- 4: U.S. Navy (F4U-1A Corsair, VF-17; SB2C-3 Helldiver, VB-7; OS2U-3 Kingfisher, 7: RAF Hunter F.6, 14 Sqn.; Phantom FGR2, 6 Sqn.; Meteor F.4, 63 Sqn., and Harrier GR.1, 1 Sqn).
- 10: USAF-S.E. Asia (RF-101C, F-105D, A-1H and EC-47N).
- 11: F-102A, 460th FIS, USAF; Harrier GR.1, 4 or 20 Sqn. RAF, Sabre 6, 430, Sqn. RCAF and alternative RCAF Sabre fin emblems.
- 16: USAF-S.E. Asia (2): F-4E Phantom, 34TFS, 288TFW, Cessna 0-2A 23 TASS, AC-47 432TRW, and USMC OV-10A Bronco, HLM-267.
- 17: T-33, RCAF; F-35 Draken, 725 Sqn., Danish Air Force; Mosquito FB.VI, 4 Sqn. RAF, Skyhawk, 805 Sqn., RAN, and A-4K squadron markings for 75 Sqn., RNZAF.
- 18: Royal Navy—Post War (Gannet 4 COD, Sea Hawk F.1., 898 Sqn., Wessex Mk. 1, Ark Royal, and Avenger 6, 831 Sqn.).
- 19: West German Air Force and Navy (RF-4E Phantom, AGS1 or S2); F-84F Thunderstreak, Jabo 31; RF-84F Thunderflash, AGS1; Sea King Mk. 41.
- 20: H.S. Buccaneer S.2's, 800 and 809 Sqn., F.A.A.; NF-SA Freedom Fighter, 314 or 315 Sqn., Dutch Air Force, and L-20A Beaver, 334 Sqn., Dutch Air Force.
- 21: A-4E Skyhawks VMA-311 VA-94; A-4F Skyhawk, VA-164, AD-4 Skyraider, VA-65, 22: A-7D Corsairs, 356 TFS, 354 TFW., and 40 TFS, 355 TFW., with alternative decals for 357 TFS, 355 TFW., T-33A, 50 TFW., and F-86A Sabre, 116 FIS.
- 23: Phantom F.G.1, 43 Sqn., Harrier G.R.1A, 3 Sqn., Lightning F.2A, 92 Sqn., All RAF CF104 Starfighter 421 Sqn., C.A.F.
- 24: RAF Hunter F.6, 79 Sqn., Phantom F.G.R.2 41 Sqn., Sea Venom F.A.W.21 809 Sqn., Sea Venom F.A.W. 21 890 Sqn., F.A.A.; Wyvern S.4, 831 Sqn., F.A.A.
- 25: Lightning F.2A, 19 Sqn., Canberra B.16 16 Sqn., Harvard T.2B, 500 Sqn., Hunter FGA.9, 45 Sqn., All RAF.
- 26: Buccaneer S.2B, 15 Sqn., Hunter FGA.9, 58 Sqn., Canberra B.2 10 Sqn., Gazelle H3T C.F.S., All RAF, R.N. Gazelle HT2.
- 27: Canberra T4, 231 OCU, RAF, Cottesmore 1974, Hunter T7, 4 FTS, RAF, Valley 1973 (or 56 Sqn., 1962), Phantom FGR.2, 111 Sqn., RAF, Coningsby, 1974, Buccaneer S.2A, 208 Sqn., RAF, Honington, 1974.
- 28: Canberra E1S, 98 Sqn., RAF, Cottesmore, 1974, Hunter T8, 764 Sqn., F.A.A., 1964, Lightning F3, 29 Sqn., RAF, Wattisham, 1971, Jet Provost TS, 3FTS, "The Swords", RAF Leeming, 1974. (Serials provided to make any one of Team)

"MODELDECAL" style fully illustrated instruction sheet, giving decal locations and full colour scheme details, is included with all Modeldecals, and commencing with set No. 17, a selection of photoaerob is also included.

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- Waco CG13A
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- Bristol Bombay
- TSR 2
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- Avro Lincoln
- S. Southampton
- S. Scapa
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- Saro London
- PB 2Y-2/3 Coronado
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- Blackburn Iris
- Blackburn Perth
- Junkers JU 290
- Junkers JU 390

### HASEGAWA A/C KITS

- Lockheed T-33A
- Curtis SO C-3 Seagull
- N.A. F-86F Sabre
- Heinkel HE-51 A-1
- F-5A Freedom Fighter
- T38A/F-5B)Talon
- A6M3 Mod 22 Zero
- A6M3 Mod 32 Zero
- Heinkel HE-51 B-2
- C. Seagull Floatplane
- Cessna A-37A
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- MIG-17E/D 'Fresco'
- P-40D Bubbletop
- P-47D Bubbletop
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- Ki-44 Shoki (Tojo)
- Ki-61 Hien (Tony)
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- BAC Lightning 6
- Aichi E 13A 'Jake'
- T-34A Mentor
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- F-101D Trainer
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- D-44E/F Skyhawk
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- FW 190D-9
- FW 190D-9
- F-4M Phantom
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- Type 94-1 'A1'
- Mitsubishi MU-2S
- Mitsubishi MU-2J
- F.15 Eagle
- G.A6A Intruder
- F-4E Phantom
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- F-102A Delta Dagger
- RA-5C Vigilante
- S2F-1 (S-2A) Tracker
- L. P2V-7 Neptune
- M. G4M1 Betty, with Baka Bomb
- G8N1 'Rita'
- Emily Flying Boat
- H6K5 Mavis Flying Boat
- Boeing B.47E
- Shinmeiwa PS-1 or SS-2
- SP-5B
- Boeing P-12E
- Curtiss BF2C-1
- ME. 163 Komet
- ME. BF109E
- F.W. 190A
- P-51D Mustang
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- ME.262A
- N. Ki43 Oscar
- N.A. F-86F Sabre

### HELLER A/C KITS

- Polikarpov I-153
- Yak-3
- Spitfire Vb
- ME.8109E-3
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- Hunter T.7 kit Conv.
- Harrier T.2 kit Conv.

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- G.E.-2A Hawkeye

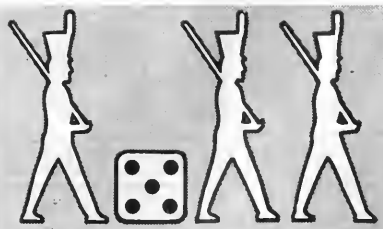
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## news for the wargamer

**Wargames Through The Ages Vol 3, 1792-1859**, by Donald F. Featherstone. Stanley Paul Ltd, 5 Fitzroy Square, London W1P 6JD. Price £4.40.

DONALD FEATHERSTONE'S *Wargames through the Ages* series does not set out to formulate complete rules for the wargamer but instead gives sound advice to those who would devise their own rules or who wish to adapt existing ones, for, as Mr Featherstone says, wargamers are a contentious lot never satisfied with a set of rules if it is at variance with their own pet theories. He himself makes no claim to be free from this vice but the material used in this book is relatively uncontroversial and should not give experienced wargamers cause to differ — much.

The book is divided into clear-cut sections which describe the effectiveness of the armies and commanders of the period 1792-1859, their formations and tactics, the confusion of a smoke-obscured battlefield and the difficulties of command control. Subsequent chapters briefly describe each major campaign fought during the American and European wars of the time. The period opens with the French Revolutionary and Napoleonic Wars and passes through the US-Mexican and Crimean Wars, concluding with the Franco-Austrian War of 1859. There is discussion of the various figure scales available and some very useful appendices listing figure manufacturers and relevant books and magazine articles. The black and white illustrations vary from excellent to less than satisfactory but all charts and diagrams used are clear and there are some endearing uniform sketches. This should be a useful book if read in conjunction with the others of the series and with Mr Featherstone's more detailed books on wargaming rules.

### World War 3

IF YOU HAVE ever bought a board wargame, such as those produced by Avalon Hill and Simulations Publications Inc, the chances are that either you have never bought another one, or that you have become addicted and now collect them. These games are, however, expensive and most collectors limit themselves to a careful selection of games, perhaps on the basis of an interest in a particular period.

Some collectors, it seems, go in for complexity. The latter should immediately rush out and buy SPI's 'World War 3'. To be fair, no treatment of such a complex subject could be simple and remain accurate. The game assumes that any world war fought in the next decade or two would be a conventional one. Provision is made for a nuclear

exchange, but it is correctly supposed that there is no point in taking the game further if this should occur!

The East Bloc have the initial advantage of surprise and can overrun Europe with ease, while the US have the long-term advantage of an enormous industrial capability.

'World War 3' is potentially one of the most fascinating of games but it suffers from one very severe defect. The playing map is far too small. So many playing pieces are stacked up in such confined spaces, especially in and around Europe, that the game becomes almost unplayable. If you have a very, very steady hand and very, very long fingernails you may manage. If you have short fingernails don't worry — the game is long enough for you to be able to grow them. In the meantime use tweezers.

Seriously though, if you are prepared to put a great deal of time and effort into 'World War 3' it should be a rewarding and thought-provoking game. It is definitely not for beginners. Available through Simulations Publications UK, Crown Passages, Hale, Altrincham, Cheshire WA15 9SP, price £4.55.

### Torgau

THE BATTLE OF Torgau, fought against the Austrians in 1760, was the most decisive and bloody engagement of the Prussian struggle for survival in the Seven Years' War. The Prussians were only successful when a final effort was made by Zeiten's Corps against the unshaken Austrian position after dusk. But for this sudden and unexpected success the battle could have proved disastrous for Prussia, surrounded on all sides by hostile forces.

The game is a long one, up to 53 turns with each representing 15 minutes of action. The die-cut counters are accurately identified by battalion or regimental numbers, and Infantry and artillery pieces are printed on both sides to permit different formations to be shown (line or column and limbered or unlimbered). Additional counters are used to indicate Infantry in square or units in disorder. Dragoon regiments are duplicated to show them in a mounted or dismounted role.

The playing surface is a map sheet of the battleground with all important features shown, including the Austrian redoubts, and superimposed with the customary hexagonal grid to regulate movement. Each player moves and/or attacks in turn, the defending player being allowed defensive fire against adjacent enemy counters. All counters have a fixed front which affects

movement and fields of fire and makes them vulnerable to attacks from flank or rear. The consequent need to face counters in a variety of directions can result in an untidy appearance unpleasing to the aesthetic, but it does have the advantage of making players instinctively strive to keep the perfect linear formations of the period for the sake of neatness, while units which have been worsted in battle rapidly take on a chaotic appearance!

Losses are shown by replacing counters with ones of reduced strength. A nice point here is that casualties will not, up to a point, reduce a unit's firepower, especially in column formation. Sufficient counters are provided to permit all units to be reduced step by step until they have been bled white to the point of breaking. The counters depicting units at breakpoint are, appropriately enough, white.

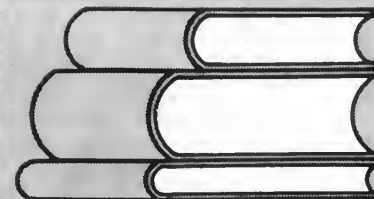
As units are reduced in size their ability to stack in a single hex with other units is increased. The ability of the various units to stack is shown on the counters in a very clear manner, and further thought has gone into showing whether stacked units are occupying the same hex side by side or one behind the other. In fact this game comes very close to achieving in a board game the sort of results obtained on a tabletop with wargaming figures, appearances apart of course. Even some of the rules will be familiar to those who regularly use miniatures in their wargaming. Movement down hills, for example, is impossible for man-handled artillery, difficult for formed infantry and more so for cavalry.

So much for detail. What of the game as a whole? A considerable degree of sophistication is achieved with simple rules and devices, and after the opening moves (made deliberately frustrating for the Prussians whose four Corps come on to the scene in unpredictable places at unpredictable times) the game becomes fast and exciting. It forcefully brings home the principles of battlefield tactics and a single slip can bring disaster. Neither side can afford to feel smug at any time and, played with opponents of equal ability, the result can be in doubt until the very end. Altogether a well produced game and recommended, it is manufactured by Game Designers' Workshop and is available through Simulations Publications UK, Crown Passages, Hale, Altrincham, Cheshire WA15 9SP, price £4.99.

### SPI prices up

SIMULATIONS PUBLICATIONS UK have advised us that the standard price of SPI games has been increased from £3.99 to £4.55, with the new QuadriGame series being priced at £6.65. Individual Folio games from the QuadriGame series will be priced at £2.15 each. Annual subscriptions to *Strategy & Tactics* will be £7.50 and individual copies of the magazine will be available at £1.75. The games published in future editions of *Strategy & Tactics* will no longer be available in boxed form but will instead be issued in the same form as the Individual Folio games from the QuadriGame series.

AIRFIX magazine



## books for modellers

### Modelling

**Model Shipwright 1975**, edited by John L. Bowen and Robert Gardiner. Model Shipwright, 2 Nelson Road, Greenwich, London SE10. Price £7.50.

FOR THE FIRST three years of its life *Model Shipwright* has been available on subscription only, but the publication of this bound volume makes it available to a much wider public.

Containing nearly 400 pages, this very attractive volume contains the complete contents of four issues plus a well thought-out index, and will have great appeal to ship modellers of all ages.

Subjects covered range widely over practically every type of boat and ship, from a radio-controlled Chinese junk to a Venetian gondola, ancient Egyptian galley or a Brixham trawler. Sailing ships, steam ships, modern warships, ships of every size, shape and description are included, together with numerous plans, photographs and construction drawings.

The illustration quality is excellent, making the book a delight to read.

Other subjects include flags, funnel markings, model ship photography, ropemaking and a wide variety of topics related to model ships in a medley of scales and materials from plastic to wood.

**Make Your Hobby Model Aircraft**, by Bryan Philpott. Intercontinental Book Productions, Purnell Books, Berkshire House, Queen Street, Maidenhead, Berks. Price 35p.

THIS 26-PAGE full-colour booklet is strictly for junior, but good fun, very well produced and superbly illustrated in colour throughout. Its main concern is with simple cardboard or balsa cut-out models and gliders, but there are also plans for a rubber-powered aircraft, and a very basic introduction to scale plastic construction kits which includes a nice idea for a diorama depicting a 'Warrior' hide.

### Aviation

**Vintage Aircraft Directory, 1975 edition**, compiled and published by Gordon Riley. Battle of Britain Prints International Ltd, 3 New Plaistow Road, London E15 3JA. Price 75p.

TO THE aero-modeller who wishes to reproduce authentic detail the existence of preserved or restored aircraft is of the greatest importance, although tracing existing examples can be a problem.

This little book, invaluable to modellers and aircraft enthusiasts alike, lists the

owner, home base, markings and state of preservation of some 2,000 vintage and replica aircraft in Britain and the Republic of Ireland. Now in its third revised and updated edition, it includes 'home-built' aircraft types for the first time, and appendices on RAF 'gate guardian' aircraft, ATC held aircraft and the British Aircraft Preservation Council register correct to April 1975. With 32 clear monochrome photographs accompanying the text, this low-priced book is thoroughly recommended and makes an ideal partner to its companion volume, *Aircraft Museums Directory*, from the same publisher.

### Warships

**Dreadnought: A History of the Modern Battleship**, by Richard Hough with an introduction by C. S. Forester. Patrick Stephens Ltd, Bar Hill, Cambridge CB3 8EL. Price £6.95.

THEY ARE ALL here — *Dreadnought* herself, *Warspite*, *Nelson*, *Rodney*, *King George V*, *Vanguard*, *Renown*, *Repulse*, *Hood*, *Bismarck*, *Tirpitz*, *Graf Spee*, *Gneisenau*, *Scharnhorst*, *Nevada*, *Pennsylvania*, *Mississippi*, *North Carolina*, *Alabama*, *Iowa*, *Missouri*, *Nagato*, *Yamato*, *Muashi*, *Jean Bart*, *Dunkerque*, *Richelieu*, *Roma*, *Littorio* — the world's most impressive warships.

This new book — first published in 1964, and now revised and reprinted — is a detailed study of the battleship and battle cruiser, from HMS *Dreadnought* in 1906 to USS *New Jersey*, the last battleship to fire her guns in anger (Vietnam, 1968). Superbly illustrated with photographs showing the ships in peace and war, and including large numbers of detail shots invaluable to modellers, this is another classic book from the author of *Death of the Battleship*, *The Potemkin Mutiny* and *The Fleet That Had To Die* which will be relished by all warship enthusiasts and modellers. It includes technical details and side view drawings of no less than 69 ships, and is produced to a large format which makes it a joy to read and own for its own sake as well as for a reference.

### Military

**Renaissance Armies 1480-1650**, by George Gush. Patrick Stephens Ltd, Bar Hill, Cambridge CB3 8EL. Price £4.25.

THIS IS THE book which all 'pike and shot' enthusiasts have been waiting for. Based on George's popular series of articles in this magazine, but with several new sections and many new illustrations, it covers the organisation, weapons, tactics, uniforms, equipment and flags of all the major and most of the minor nations in and around

Europe during the Renaissance.

In military as in other arts the Renaissance was a significant period of change and innovation, which saw the gradual disappearance of the medieval weapons such as longbow, crossbow and halberd in favour of the new dense formations of pikemen, increasingly supported and finally superseded by infantrymen armed with arquebus and musket. It was a period of experimentation not only with arms but also with tactics, in which the great captains were Maurice of Nassau and Gustavus Adolphus of Sweden. It was also a period of great colour, with multi-hued puffed, slashed, striped and piped 'uniforms' and equally colourful troop types inside them, ranging from the famous Landsknechts and Janissaries to Polish winged hussars and the (three) French musketeers.

Each of these aspects of Renaissance armies is well brought out in the authoritative but easy to read text in this new book, together with the 500-plus line and tone illustrations culled from libraries and museums all over Europe. *Renaissance Armies 1480-1650* is thus not only an ideal source of painting details for figure modellers and wargamers, but also an essential reference on the military history of the period for all serious historians and history students. And all for the price of a single 54 mm metal cavalry figure!

### Railways

**The History of Railways in Britain**, by Frank Fernyhough. Osprey Publishing Ltd, 12-14 Long Acre, London WC2. Price £6.50.

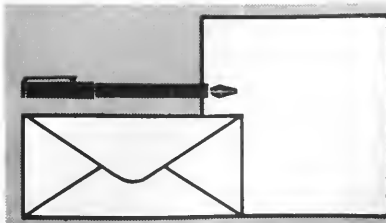
IT WILL NOT have escaped the notice of most keen railway fans that 1975 is the 150th anniversary of Britain's and the world's first practical steam railway. This attractive and well-produced book is a fitting tribute to what followed the ceremonial opening on September 27 1825 of the Stockton & Darlington Railway.

If your interest in railways is more specialised and less all-embracing than this book, you may feel inclined to invest your £6.50 elsewhere. But our guess is that the book's pleasing design and attractive selection and use of illustrations (some in colour) will convince you that it should have a place on your shelf. In it you will travel from an opening chronology, via the story of the pioneers, the early days of steam, the railway builders and the great Victorian railway companies, to chapters on 'The Champagne Years', railways in the 20th century, state ownership, and the last ten years.

The book concludes with chapters on the classic locos, great personalities (wherein you will find such gems as the fact that Sidney Weighell, the NUR's General Secretary, once played for Sunderland reserves), and appendices on railway accidents, London's Underground, railway enthusiasts' and preservation societies, and three useful indexes.

Doubtless the history of railways in Britain would need many more than this book's 288 pages, but here is an eminently 'browsable' and informative volume that cannot fail to interest anyone with a yen for the subject.





## letters to the editor

### Contributions

Letters to the editor selected for publication entitle the senders to each receive a free Airfix plastic construction kit, and the publication of photographs from readers is similarly rewarded. Airfix Products Ltd award the kits on the following scale:

ONE letter or photograph published is rewarded by any kit from Series 1-6 inclusive. For TWO letters or photographs any one kit up to and including Series 9 can be chosen, or alternatively two kits up to Series 6. For THREE contributions the entitlement is one kit up to Series 12 or three kits up to Series 6. Readers can make their choice on the special form which we send out after publication. The kits are supplied direct by Airfix Products Ltd.

Letters to the editor should be addressed to: the Editor, *Airfix Magazine*, Bar Hill, Cambridge, CB3 8EL. If a reply is wanted, a stamped addressed envelope (or International Reply Coupon) should be enclosed. All photographs submitted for consideration should be clearly labelled with the sender's name and address on the back of each.

Opinions expressed by correspondents on this page are their own and do not necessarily reflect the views of the Editor or Airfix Products Ltd.

### Operation Sealion

TERRY WISE'S series on Operation Sealion has prompted me to correspond since my grandson and I recently made a model harbour from Airfix kits which would be ideal to represent part of this.

It is also interesting to me since my battalion, the 7th Pioneer Bn, The York & Lancaster Regiment, was in 55th Division at that period (we were later changed to infantry when we were posted to India and Burma).

In the July issue, Terry Wise mentions Motor Coach Companies being organised. Our main transports were civilian buses painted over with khaki. Our role was digging anti-tank ditches filled with mines and making double-apron fences with triple Denmet wiring. This was carried out on the coast at Brightlingsea, Mersea Island, Southwold and the Lowestoft areas. At other times we were detailed to travel inland to the Bury St Edmunds area and construct machine-gun posts at crossroads. These consisted of well sand-bagged slit trenches.

We were a raw set of lads! Terry Wise's chart in the July issue gives HQ plus three companies as a battalion. We had HQ Coy plus A, B, C and D Companies, two companies being formed from Yorkshire and two from Plymouth. Our commanding officer was Lieutenant Colonel E. P. Boyles MVO (of the Royal Scots Fusiliers); second

i/c was Major Doyle and the Adjutant Captain Dimmock. The hard core of our NCOs were from the Highland Division and had seen heavy service in France — men from the KOSB, HLI and Cameronians.

A photo in the June issue showed 'Germans' 'captured' during the anti-invasion exercises in the summer of 1940. I do not think it would have happened. Our NCOs would not have stood for it — they drummed it into us day after day what we were up against.

We were on Active Service, leaving Leeds on May 30 1940 and doing our training at Richmond, where the battalion was formed. One of my earliest recollections is of the small boats going down the Thames to Dunkirk. We moved into East Anglia at the

Mr John Carter, photographed in 1940, holding up the flying jacket of one of the crashed He 111's crew members.



end of June. At this time we were confined to camp except for going on work details. We had one day out per week in the buses, with full kit, rifle and 20 rounds of ammunition, which was to take a bath at a mental hospital near Woodbridge.

Terry Wise's chart showing the shortage of arms is quite correct — we had one Boys anti-tank rifle and one Bren gun for training purposes and mounting at Stand To.

At Christmas 1940 our commanding officer complimented us and gave us the information that we had helped build and defend the 'Blue Line' against the enemy.

To conclude, may I refer to the August issue and John Burgess' article on the Heinkel He 111. During July to October 1940 one of our jobs, as we were mobile, was, on receiving a signal or actual sighting of an aircraft crash, to proceed to search for possible survivors. In September a Heinkel 111 crashed near Woodbridge. We proceeded to the spot and cordoned off the area, then pulled out the charred remains of the crew after the fire had been extinguished. Everything that could be of any use was placed into piles for inspection by the Intelligence Officer. On this occasion one of the things which escaped the fire was a manual describing an improved bomb sight, which made him very happy. The only souvenir I got was a pair of tweezers from the medical kit which I still use today for Airfix modelling!

J. Carter, Kelghley, Yorks.

### British infantry

JOHN SANDARS has written to inform me that the motor infantry section for 1941 in the Middle East consisted of six men, one bren, an A/T rifle and a 15 cwt vehicle. It is reasonable to assume the 1940 motor section was the same. (I listed it as unknown in the second article of the Sealion series.)

John also points out that I have shown each infantry platoon as having an A/T gun; this should have been A/T rifle; and he queries the 1940 infantry division organisation chart. I must confess this chart may be inaccurate, and state that it does not coincide with those for the Western Desert in 1941 or the BEF in early 1940. The chart is in fact my own interpretation, drawn from figures of men and equipment available after Dunkirk, the number of divisions and their state of readiness, and is therefore an amalgamation of snippets of information drawn from various contemporary works and later analyses.

My thanks to John for pointing out the error, supplying information, and raising the query over infantry organisation.

Terry Wise, Woolaston, Glos.

### Green Phantoms

I NOTICED AT the USAF open day at Lakenheath on August 2 a number of the resident F4Ds (coded LN) have now been painted in three shades of green, this being done by replacing the 'tan' with a light green.

Two reasons were forthcoming for this change, first there was a shortage of 'tan' paint (now we know where Airfix and Humbrol got theirs?) but more likely, the SE Asia colours are not exactly suited to the European field thereby making a change desir-

able. Regrettably I have been unable to spot a good Airfix Paint equivalent, but Humbrol No 36, after matting down, is almost the exact shade required.

May I mention here that I am at present writing a book on the F4 and would be very interested to hear from anyone who has any information on early production variants, ie early F4A squadrons (USN), F4A Record-breakers and test aircraft. In the meantime, however, I hope the above-mentioned info will be useful.

Ian Dewar, Hoprig Farm, Macmerry, E. Lothian.

### TV programmes

READERS WHO missed the BBC's 'Model World' series of programmes first time round have another opportunity to see them now at 10 am on Saturday mornings. The first four programmes have already been screened, but on November 8 comes 'Model Power Boats'; November 15 'Military Modelling 1' — making and converting military figures, horses and dioramas; November 22 'Military Modelling 2' — painting figures and horses, making military vehicles, and wargaming; November 29, December 6 and December 13 — 'Model Railways'. These programmes are attractively presented although the time devoted to each subject is so short that there is little depth for the experienced modeller. An accompanying BBC book was reviewed in our July 1975 issue.

### Frog Javelin

IT WAS WITH particular interest that I read the write-up on the new Frog Javelin kit in the August *Airfix Magazine*, having served with 64 Squadron while they were equipped with Javelin 9s. The first thing that struck me was the length of the nose and this set me searching through old photograph albums for confirmation.

The shortness in the nose appears to be in the length of the radome rather than the airframe. Incidentally, the photograph of the model shows the radome as being glossy

Below Javelin FAW9 XH874 'H' in static display at Biggin Hill, September 16 1961. Bottom FAW9 XH879 'D' of 64 Squadron at Waterbeach, September 1961.



November 1975



Roger Lindsay sent us this interesting photograph which shows the first operational UK-based Lightning to appear in camouflage. The machine is Mk T5 XS452 of No 11 Squadron, RAF Binbrook, and is finished in dark green upper surfaces with 'low visibility' roundels and natural metal under surfaces.

black, in fact they were of unpainted fibre-glass construction with a semi-matt purplish black colour. After weathering this developed a bloom on it which I can only liken to the bloom on an untouched plum.

The style of the individual code letter on the tail fin appears to be upright whereas it should slope towards the rear of the aircraft. From my photographs you will see that when the aircraft is standing on the ground the all flying tailplane is tilted up a few degrees, a point that doesn't show up on the model.

J. A. Tyler, Dartford, Kent.

### Life Guards

A SPECIAL exhibition at the National Army Museum from November 14 for four months will tell the story of the Life Guards from 1661 to date, and will include prints bequeathed to the museum by the First Baron Fairhaven as well as weapons, uniforms, drums and other relics. The museum is open daily except over Christmas and New Year's Day from 10 to 5.30 on

Monday to Friday and from 2 to 5.30 on Sundays. Admission is free and it's well worth a visit.

### Military modelling

THE NORTH LONDON Military Modelling Society, formed recently, has now grown to such a size that regular meetings, demonstrations and outings are held on the first Friday of each month. Further details are available from Mr. J. F. Spinks, 55 Woodfall Avenue, Barnet, Herts EN5 2HB.

The society has also announced that it will be holding a December Model Fair at the Green Lanes Youth Centre (between Clissold Park and Newington Green) on December 6 from 10 am to 6 pm. Trade stands, model displays and other features will be included and all are welcome to attend.

### Liberator query

I AM, AT present engaged on a study of converted Liberators, and wondered whether any reader has details of the colour scheme worn by the machine flown by Captain Vanderkloot, USAF?

M. Grimsley, Oakley Cottage, Grubwood Lane, Cookham Dean, Berks.

### Easibinders

WILL ALL READERS intending to order *Airfix Magazine Easibinders* please note that, from the January issue, the page size of *Airfix Magazine* will be increased to A4 (11¼" x 8¼"), and new Easibinders will next year be made available to suit the new size. These larger Easibinders will take the present size magazines, but not vice versa. If you want an Easibinder for your Volume 17 or 1976 issues, therefore, please order the new size in January. Limited stocks of the old-size Easibinders will remain available for some time, but if you have any unbound volumes order your old-size binders now to avoid disappointment.

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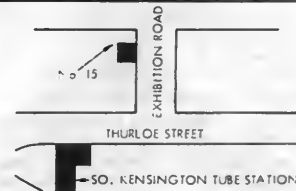
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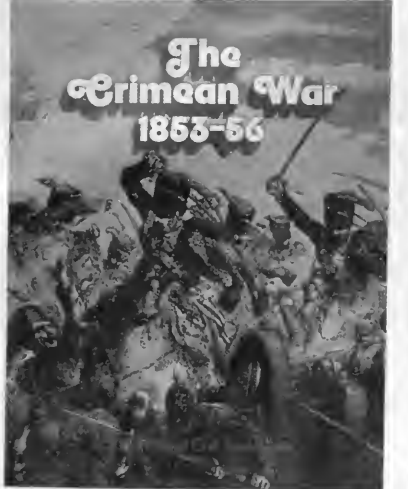
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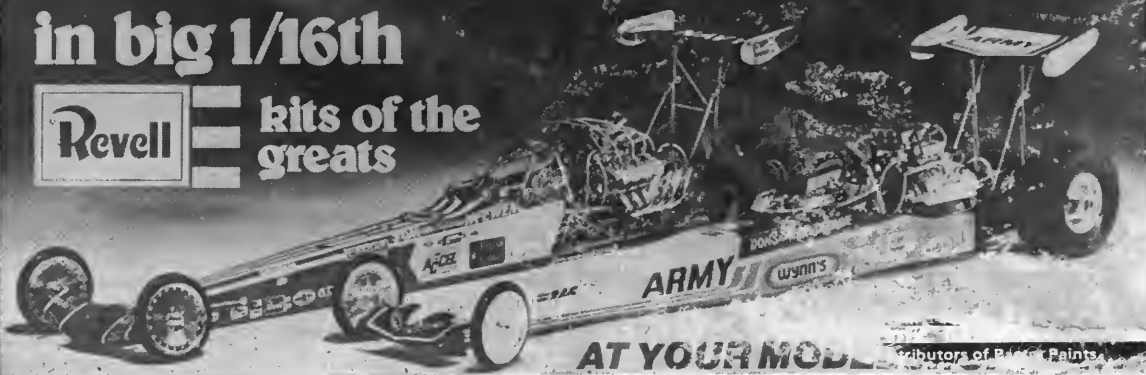
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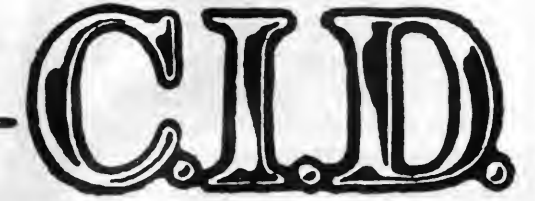
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No. 6

# What do you know about the police?



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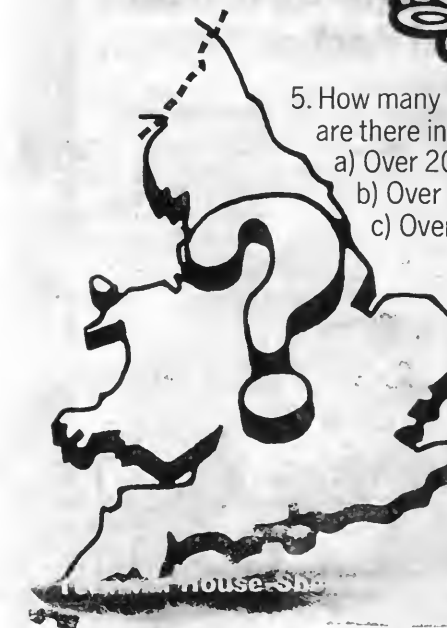


2. What does "C.I.D." stand for?

3. Which is the highest rank held by a policewoman?



4. Is a chequered cap band the sign of a particular police rank?



5. How many police officers are there in England & Wales?

- a) Over 20,000.
- b) Over 50,000.
- c) Over 100,000.

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ANSWERS

1. No, the Metropolitan Police assumed the responsibilities of the police of the airport in 1974.
2. Criminal Investigation Department.
3. At present, Commander in the Metropolitan Police, but women cap bands.
4. No, all ranks in the police should eventually wear chequered cap bands.
5. c.



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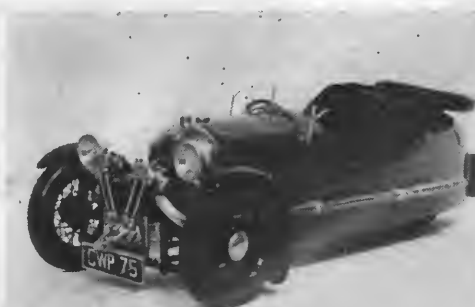
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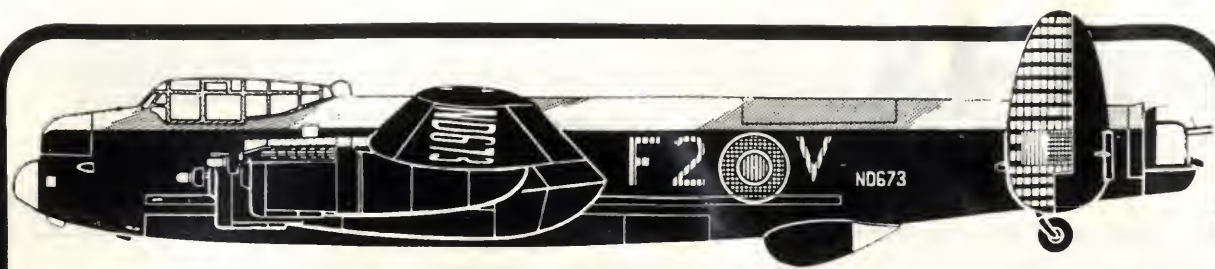
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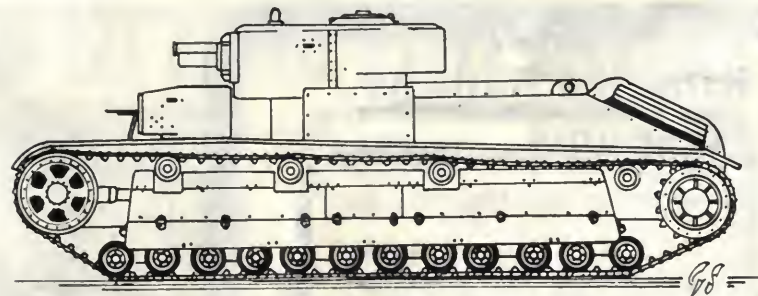


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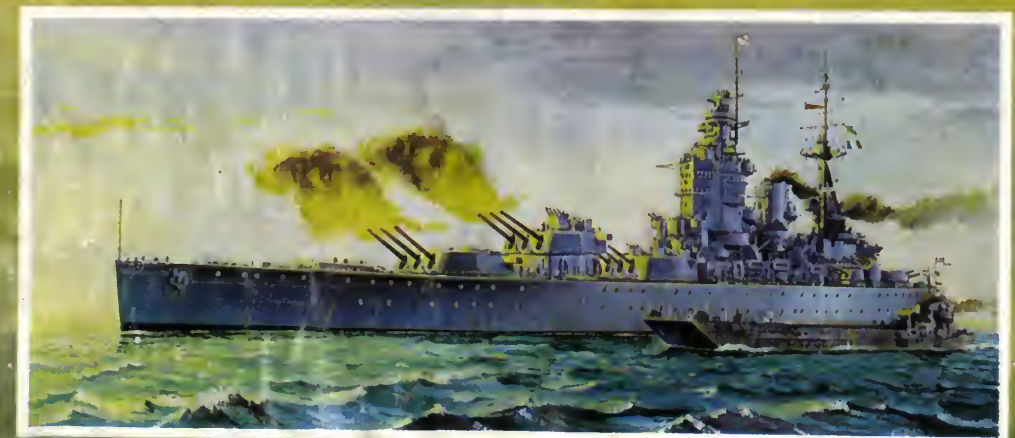
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